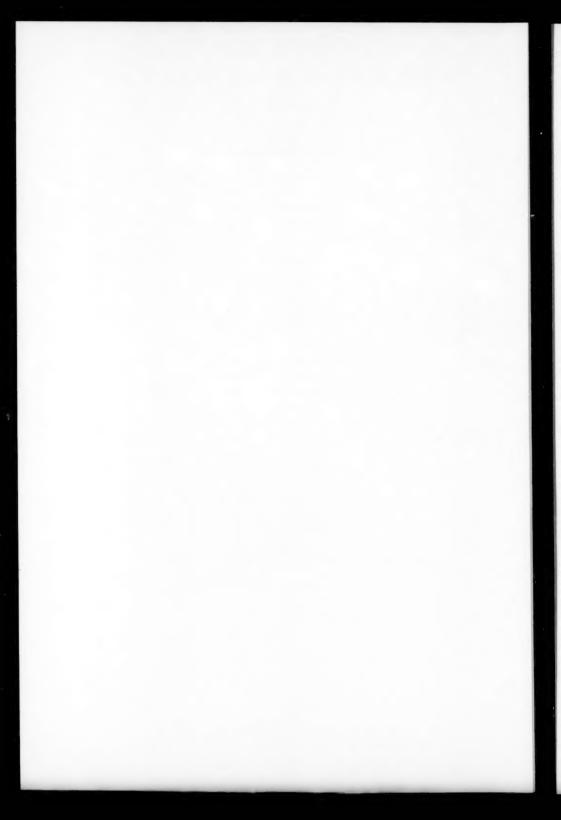
AGRICULTURAL WATER MANAGEMENT

Volumes 1-25, 1976-1994

PUBLICATION OVERVIEW

Volume 1	1976/1978
Volume 2	1979/1980
Volume 3	1980/1981
Volume 4	1981
Volume 5	1982
Volume 6 Volume 7	1983 1983
Volume 8 Volume 9	1984 1984/1985
Volume 10	1985
Volume 11 Volume 12	1986 1986/1987
Volume 13 Volume 14 Volume 15	1988 1988 1988/1989
Volume 16	1989
Volume 17 Volume 18	1990 1990
Volume 19 Volume 20	1991 1991/1992
Volume 21 Volume 22	1992 1992
Volume 23 Volume 24	1993 1993
Volume 25	1994



SUBJECT INDEX

Agricultural Water Management, volumes 1-25

Contents

Introduction		305
1.	Irrigation	307
	1.1. Method	307
	1.2. Schedule	310
	1.3. Regime	310
	1.4. Design and construction	312
	1.5. Monitoring, operation and maintenance	313
	1.6. Socio-economic aspects	316
2.	Drainage	317
-	2.1. Method	317
	2.2. Design and construction	318
	2.3. Monitoring, operation and maintenance	318
	2.4. Reuse and disposal	319
	2.5. Socio-economic aspects	320
3	Soil, soilwater and groundwater	320
٥.	3.1. Soil	320
	3.2. Soilwater	323
	3.3. Groundwater	327
4	Salt	329
	Water conservation	333
	Climate and hydrology	335
0.	6.1. Climate	335
	6.2. Hydrology	337
7	Crop growth and crops	339
1.	7.1. Crop growth	339
	10	346
0	7.2. Crops	353
0.		
	8.1. Land use	353
•	8.2. Farm management	354
	Research methods	356
10.	Models	358
	10.1. Combined models	358
	10.2. Irrigation models	358
	10.3. Drainage models	360
	10.4. Groundwater and soilwater models	360
	10.5. Other models	361



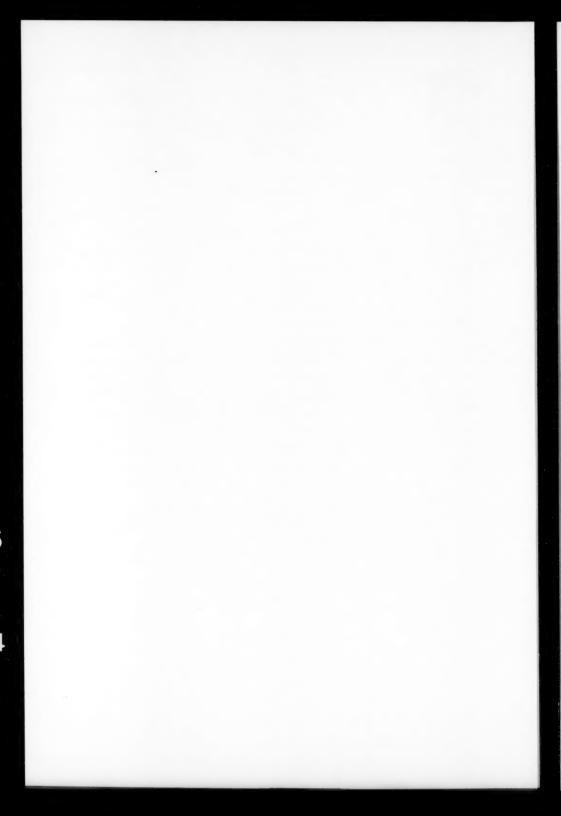
Introduction

Agriculture Water Management covers a broad spectrum of subjects in the fields of irrigation, drainage, and water conservation. The 25 volumes show a wide diversity in publications, including subjects such as cloud seedling, socio-economic aspects of irrigation, salt or pesticide leaching, filter envelopes for pipe drainage, groundwater flow, and breeding for drought resistance of crops, all in one way or another pertaining to water management for agriculture.

In view of this broad range of subjects, the keywords of the index, a total of 332, have not been listed simply in alphabetical order, but first according to a division in sections and, often, in subsections, and then alphabetically in the sections or subsections, which contain at the most about 25 keywords. In this way, the index user, after consulting the division in sections and subsections, can rapidly survey all publications in the past 25 volumes pertaining to irrigation methods, crops, models, etc. The division of the keywords is somewhat arbitrary, e.g. salt tolerance has been listed in Section 7.1. Crop growth, as it is a crop property and refers to crop growth, but it could also have been listed in Section 4. Salt. Sometimes a second keyword is placed between brackets behind a keyword with which it is synonymous or narrowly related e.g. continuous irrigation (ponding), filter envelope (drain filter), infiltration (infiltration rate, water intake rate, infiltration characteristics, cumulative infiltration, infiltration equation).

Authors of future publications are requested to use the keywords of this index and, when introducing new keywords, to indicate the sections or subsections, in which those keywords should be listed.

J.W. van HOORN



1. Irrigation

1.1. Method

Basin irrigation

Analysis of basin irrigation performance with variable inflow rate, 5 (1982) 295

Water losses through the bunds of irrigated rice fields interpreted through an analogue model, 11 (1986) 59

Estimation of Manning's roughness coefficient for basin and border irrigation, 18 (1990) 29

Irrigation uniformity of level basins as influenced by variations in soil water content and surface elevation, 19 (1991) 325

Statistical analyses of soil variability: effects of variability on level-basin irrigation of wheat, 21 (1992) 177

Border irrigation

Design of a farm layout for irrigation with limited discharges, 3 (1980) 143

A design procedure for closed end irrigation borders, 5 (1982) 1

Closed border irrigation evaluations, 9 (1984) 139 Effects of crop and surface irrigation method on water intake rate of soil, 12 (1987) 305

An optimization technique for estimating infiltration characteristics in border irrigation, 13 (1988) 13

Estimation of Manning's roughness coefficient for basin and border irrigation, 18 (1990) 29

Infiltration characteristics of some clayey soils measured during border irrigation, 21 (1992) 265

Determination of infiltration characteristics by volume balance for border check irrigation, 23 (1993) 23

Bubbler irrigation

Uniform irrigation with a low-head bubbler system, 1 (1977) 167

Center-pivot irrigation

Losses from low-pressure center-pivot irrigation systems in a desert climate as affected by nozzle height, 21 (1992) 23

Water and energy conservation using irrigation scheduling with center-pivot irrigation systems, 22 (1992) 325

Water conservation through irrigation scheduling under arid climatic conditions, 24 (1993) 251

Closed conduit irrigation

Technical and economic considerations in the design of closed conduit irrigation systems: a case study, 5 (1982) 15

Microcomputer for on-line control and operation of closed-conduit irrigation systems: an economical assessment, 16 (1989) 137

Distillation irrigation

Distillation irrigation: a low-energy process for coupling water purification and drip irrigation, 15 (1989) 253

Dragline irrigation

Dragline irrigation, practical experiences with sugar cane, 17 (1990) 25

Drip (trickle) irrigation

Irrigation frequency and total water application with trickle and furrow systems, 1 (1976) 21

Soil and plant water status under sprinkling and trickling, 1 (1976) 33

Observations of soil water and salt movement under drip and flood irrigation in an apple orchard, 1 (1977) 179

Trickle irrigation water quality and preventive maintenance, 2 (1979) 149

Trickle irrigation timing and its effect on plant and soil water status, 2 (1979) 225

Trickle irrigation: emitter clogging and other flow problems, 3 (1981) 159

Simulation of water flow in the soil under subsurface trickle irrigation with water uptake by roots, 3 (1981) 179

Distribution of water and salt in soil under trickle and pot irrigation regimes, 3 (1981) 195

Yield and quality of furrow and trickle irrigated hop (*Humulus Lupulus* L.) in Washington State, 7 (1983) 457

Supplemental irrigation of bananas in St. Lucia, 9 (1984) 149

Irrigation with brackish water under desert conditions, I. Problems and solutions in production of onions (Allium Cepa L.), 9 (1984) 225

Yield of single versus twin-row trickle irrigated cotton, 9 (1984) 237

Yield and quality of trickle-irrigated chile peppers, 9 (1985) 339

Trickle irrigation of cotton: effect on soil chemical properties, 11 (1986) 159

Bare soil evaporation near a surface point-source emitter, 11 (1986) 257

Irrigation with brackish water under desert conditions, IV. Salt tolerance studies with lettuce (Lactuca sativa L.), 11 (1986) 303 Irrigation with brakish water under desert conditions, V. Nitrogen requirement of tomatoes (Lycopersicon esculentum Mill.) during germination under drip irrigation, 11 (1986) 313

Transport of a degradable substance and its metabolites under drip irrigation, 12 (1987)

Soil-water dynamics and optimum operating regime in trickle-irrigated fields, 13 (1988) 127

Irrigation scheduling and cantaloupe yield model for the Jordan Valley, 15 (1988) 177

Effect of spatial variability on the estimation of the soluble salt content in a drip-irrigated saline loam soil, 15 (1989) 361

Irrigation with brackish water under desert conditions, VIII. further studies on Onion (Allium cepa L.) production with brackish water, 16 (1989) 201

Deficit irrigation effects on head cabbage production, 16 (1989) 229

Importance of irrigation regime, dripline placement and row spacing in the drip irrigation of sugar cane, 17 (1990) 75

Plant-water relations of sugar cane (Saccharum officinarum L.) under a range of irrigated treatments, 17 (1990) 95

Experience with approximately 600 hectare of drip irrigation at Simunye Sugar Estate, Swaziland, 17 (1990) 151

Soil physics and irrigation: tapping the potential for drip, 17 (1990) 159

Soil Water Status: a concept for characterising soil water conditions beneath a drip irrigated row crop, 17 (1990) 171

The control of drip irrigation of sugarcane using 'index' tensiometers: some comparisons with control by the water budget method, 17 (1990) 180

The partitioning of light and water in drip irrigated plant cane with a maize intercrop, 17 (1990) 235

Influence of drip irrigation emission rate on distribution and drainage of water beneath a sugar cane and a fallow plot, 17 (1990) 267

A comparative study of the financial and economic viability of drip and overhead irrigation of sugarcane in Mauritius, 17 (1990) 307

An assessment of drip irrigation of sugar cane on poorly structured soils in Swaziland, 17 (1990) 325

Trickle irrigation of sunflower with municipal wastewater, 19 (1991) 67

Effects of trickle irrigation on the growth and sunscald of bell peppers (Capsicum annuum

L.) in southern Quebec, 19 (1991) 181

Trickle irrigation rates and soil salinity distribution in an almond (*Prunus amygdalus*) orchard, 19 (1991) 271

A comparison between drip and furrow irrigation in cotton at two levels of water supply, 19 (1991) 313

Contrasting soil moisture environments beneath sugar cane drip irrigated during the day, and at night, 22 (1992) 271

Effect of water regime on yield of drip irrigated first ratoon cane intercropped with maize and groundnut, 22 (1992) 281

Canopy temperature to assess daily evapotranspiration and management of high frequency drip irrigation systems, 22 (1992) 379

Use of an hydrophilic polymer to improve water storage and availability to crops grown in sand dunes, I. Corn irrigated by trickling, 23 (1993) 303

Water use, wetted soil volume, root distribution and yield of avocado under drip irrigation, 24 (1993) 119

Relationships between leaf water potential, CWSI, yield and fruit quality of sweet lime under drip irrigation, 25 (1994) 13

Effect of drip irrigation and mulching on tomato yield, 25 (1994) 179

Furrow irrigation

Irrigation frequency and total water application with trickle and furrow systems, 1 (1976) 21

Observations of soil water and salt movement under drip and flood irrigation in an apple orchard, 1 (1977) 179

Irrigation water conservation by using widespaced furrows, 5 (1982) 309

Choosing optimal design depth for surface irrigation systems, 6 (1983) 335

Yield and quality of furrow and trickle irrigated hop (Humulus Lupulus L.) in Washington State, 7 (1983) 457

Furrow irrigation design for vertisols, 9 (1984) 211

Effects of alternate-furrow irrigation: water conservation on the yields of two soybean cultivars, 10 (1985) 253

Within-row irrigation saves water on croplands, 11 (1986) 31

Effects of crop and surface irrigation method on water intake rate of soil, 12 (1987) 305

Optimizing the uniformity of irrigation and fertilization, 13 (1988) 285 Variance of water advance in wide-spaced furrow irrigation, 16 (1989) 5

Yield variability and water use in wide-spaced furrow irrigation, 16 (1989) 15

An assessment of drip irrigation of sugar cane on poorly structured soils in Swaziland, 17 (1990) 325

A comparison between drip and furrow irrigation in cotton at two levels of water supply, 19 (1991) 313

Furrow irrigators response to in-season precipitation and geographic characteristics, 23 (1993) 41

Water use and yields of cotton grown under wide-spaced furrow irrigation, 24 (1993) 27

Alternate-furrow irrigation for soybean production, 24 (1993) 133

Lowhead drip irrigation

A low head drip irrigation system for smallholdings, 17 (1990) 37

Manual irrigation

Manual irrigation in Middle America, 1 (1977) 155

Pot irrigation

Distribution of water and salt in soil under trickle and pot irrigation regimes, 3 (1981) 195

Pump irrigation

PUMPMOD: a simulation model for multipump rice irrigation systems, 15 (1989) 333

Simulation model use for analyzing decision variables in multipump rice irrigation system operation, 17 (1990) 339

Sprinkler irrigation

Soil and plant water status under sprinkling and trickling, 1 (1976) 33

Design procedure of sprinkling laterals: the mathematical background of a computerized aid, 3 (1981) 269

Evaporation and drift losses from sprinkler irrigation systems under various operating conditions, 8 (1984) 439

Nitrogen leaching during sprinkler irrigation of a Dutch clay soil, 9 (1984) 37

Irrigation with brackish water under desert conditions, I. Problems and solutions in production of onions (Allium Cepa L.), 9 (1984) 225

A Pearson distribution model describing sprinkler irrigation efficiency, 9 (1985) 325

Irrigation with brackish water under desert conditions, III. Methods for achieving good germination under sprinkler irrigation with brackish water, 10 (1985) 335

Evaluating continuous-move sprinkler machines using time-series statistics, 12 (1986) 87

Optimizing the uniformity of irrigation and fertilization, 13 (1988) 285

Dragline irrigation, practical experiences with sugar cane, 17 (1990) 25

A comparative study of the financial and economic viability of drip and overhead irrigation of sugarcane in Mauritius, 17 (1990) 307

The distortion by wind of the distribution patterns of single sprinklers, 19 (1991) 341

Losses from low-pressure center-pivot irrigation systems in a desert climate as affected by nozzle height, 21 (1992) 23

Use of an hydrophilic polymer to improve water storage and availability to crops grown in sand dunes, II. Cabbage irrigated by sprinkling with different water salinities, 23 (1993) 315

Rootzone processes and the efficient use of irrigation water (Review), 25 (1994) 1

Sub-irrigation

An electrical analogue to design subirrigation systems, 6 (1983) 321

Rainfall probability forecasts used to manage a subdrainage-subirrigation system for watertable control, 15 (1988) 47

Simulation of controlled drainage in open-ditch drainage systems, 18 (1990) 301

A simple flow resistance model for the management of drainage/sub-irrigation systems, 21 (1992) 67

Surge (surge flow) irrigation

Surge irrigation management, 11 (1986) 279

Adopting water-conserving irrigation technology: the case of surge irrigation in Arizona, 18 (1990) 15

Tank irrigation

Impact of varying water supply on input use and yields of tank-irrigated rice, 15 (1989) 347

Windmill irrigation

An analysis of the appropriateness of wind and other energy systems for irrigation water pumping in India, 4 (1981) 445

Chance-constrained optimal windmill irrigation system design, 12 (1987) 279

1.2. Schedule

Continuous irrigation (ponding)

Water balance of flooded rice paddies, 1 (1978)

Deep percolation during prolonged ponding of a swelling soil, and the effect of gypsum treatment, 2 (1979) 131

Twenty years of research on reclamation of saltaffected soils in Romanian rice fields, 9 (1984) 245

Water losses through the bunds of irrigated rice fields interpreted through an analogue model, 11 (1986) 59

Solute displacement in a silt loam soil as affected by the method of water application under different evaporation rates, 12 (1986) 63

Irrigation requirements of rice under shallow watertable conditions, 12 (1986) 127

Effect of intermittent irrigation on groundwater table contribution, irrigation requirement and yield of rice in Mollisols of the Tarai Region, 18 (1990) 231

Effect of varying water regimes on soil physical properties and yield of rice in mollisols of Tarai region, 20 (1991) 71

Demand irrigation

Computerized scheduling for irrigation management and pumping operations in the watercourse command, 18 (1990) 1

Intermittent irrigation

Water balance of flooded rice paddies, 1 (1978) 277

Solute displacement in a silt loam soil as affected by the method of water application under different evaporation rates, 12 (1986) 63

Irrigation requirements of rice under shallow watertable conditions, 12 (1986) 127

Effect of intermittent irrigation on groundwater table contribution, irrigation requirement and yield of rice in Mollisols of the Tarai Region, 18 (1990) 231

Effect of varying water regimes on soil physical properties and yield of rice in mollisols of Tarai region, 20 (1991) 71

Rotational irrigation

Requirements for the successful introduction and management of rotational irrigation, 1 (1976)
41

Optimal operation schedule of irrigation distribution systems, 11 (1986) 23 Computerized scheduling for irrigation management and pumping operations in the watercourse command, 18 (1990) 1

Supplemental irrigation

Supplementary irrigation for sequential cropping in the Ethiopian highland vertisols using broadbed and furrow land management system, 20 (1991) 173

Water management strategy for increasing monsoon rice production in Bangladesh, 22 (1992)

Irrigation requirement of transplanted monsoon rice in Bangladesh, 23 (1993) 199

Effect of irrigation on growth, yield and evapotranspiration of mustard (*Brassica juncea*) in partially reclaimed sodic soils, 23 (1993) 225

1.3. Regime

Irrigation amount (irrigation depth, water application)

Irrigated guayule — evapotranspiration and plant water stress, 10 (1985) 61

Irrigated guayule — plant growth and production, 10 (1985) 81

Water quantity and quality requirements of guayule: current assessment, 10 (1985) 205

Effects of alternate-furrow irrigation: water conservation on the yields of two soybean cultivars, 10 (1985) 253

Water and fertilizer interrelations with irrigated maize, 18 (1990) 49

Production functions relating crop yield, water quality and quantity, soil salinity and drainage volume, 19 (1991) 51

Trickle irrigation rates and soil salinity distribution in an almond (*Prunus amygdalus*) orchard, 19 (1991) 271

Furrow irrigators response to in-season precipitation and geographic characteristics, 23 (1993) 41

Water use and yields of cotton grown under wide-spaced furrow irrigation, 24 (1993) 27

Water use, wetted soil volume, root distribution and yield of avocado under drip irrigation, 24 (1993) 119

Alternate-furrow irrigation for soybean production, 24 (1993) 133

Irrigation frequency (irrigation timing)

Response of tall fescue to irrigation water salinity, leaching fraction, and irrigation frequency, 7 (1983) 439

Contrasting soil moisture environments beneath sugar cane drip irrigated during the day, and at night. 22 (1992) 271

Water use and yields of cotton grown under wide-spaced furrow irrigation, 24 (1993) 27

Irrigation regime (combination of amount and frequency)

Irrigation frequency and total water application with trickle and furrow systems, 1 (1976) 21

Remote sensing for agricultural water management and crop yield prediction, 1 (1978) 299

Leaf osmotic potential as an indicator of crop water deficit and irrigation need in rapeseed (Brassica napus L.), 1 (1978) 351

Frequency and amount of irrigation for maize in western Nigeria, 2 (1979) 233

Water and salt transport, water uptake, and leaf water potentials during regular and suspended high frequency irrigation of citrus, 2 (1979) 241

Yield, water use and root distribution of wheat as affected by pre-sowing and post-sowing irrigation, 2 (1980) 289

Sugarcane response to irrigation and straw mulch in a subtropical region, 3 (1980) 35

Frequency and depth of irrigation for groundnut, 3 (1980) 45

Water use and wheat yields in northern India under different irrigation regimes, 3 (1980) 107

Wheat root distribution, water extraction pattern and grain yield as influenced by time and rate of irrigation, 3 (1980) 115

Yield response of a semi-dwarf wheat variety to irrigation on a calcareous brown flood plain soil of Bangladesh, 3 (1981) 217

Water use and water-use efficiency of wheat and barley in relation to seeding dates, levels of irrigation and nitrogen fertilization, 3 (1981) 305

A method for applying crop sensitivity factors in irrigation scheduling, 5 (1982) 335

Effect of irrigation and harvesting dates on the yield of spring-sown sugar-beet, 5 (1982) 345

Effect of small irrigation amounts on the yield of wheat, 6 (1983) 31

Wheat root growth, grain yield and water uptake as influenced by soil water regime and depth of nitrogen placement in a loamy sand soil, 6 (1983) 365

Irrigation in the Great Plains, 7 (1983) 157

Strategies for agricultural development in the Fayoum area, Egypt, 9 (1985) 287

Yield and quality of trickle-irrigated chile peppers, 9 (1985) 339 Irrigation with brackish water under desert conditions, II. Physiological and yield response of maize (Zea Mays) to continuous irrigation with brackish water and to alternating brackish-fresh-brackish water irrigation, 10 (1985) 47

Irrigation scheduling effects on yield and phosphorus uptake of cowpea, 10 (1985) 343

Response of wheat to irrigation with small amounts of water applied in various ways, 10 (1985) 357

Water balance and pattern of soil water uptake in a peach orchard, 11 (1986) 145

Trickle irrigation of cotton: effect on soil chemical properties, 11 (1986) 159

Fresh market tomato yields as affected by deficit irrigation using a micro-irrigation system, 12 (1986) 117

Climate-normalized cotton leaf water potentials for irrigation scheduling, 12 (1987) 293

Water use and yield response of wheat to irrigation and nitrogen on an alluvial soil in North India, 12 (1987) 311

Evapotranspiration, pan evaporation and soil water relationships for wheat (*Triticum aestivum*), 13 (1988) 65

Improving irrigation management by modelling the irrigation schedule, 13 (1988) 113

On the modelling of the infiltration process in arid zones for irrigation project purposes with the aid of the 'Système Hydrologique Européen' (SHE), 13 (1988) 195

Prediction of irrigation scheduling with the numerical model SWATRE, 14 (1988) 299

The influence of sub-soil on the moisture regime in irrigated fields, 14 (1988) 307

Response of groundnut to drought stress in different growth phases, 15 (1989) 301

Effect of soil matric potential and nitrogen on growth, yield, nutrient uptake and water use of banana, 16 (1989) 109

Deficit irrigation effects on head cabbage production, 16 (1989) 229

Effects on irrigation frequency and watertable depths on root growth and yield of tomato in a tropical soil, 16 (1989) 241

Minimal irrigation on small agricultural watersheds with red soils in the semi-arid tropics of Andhra Pradesh, India, 16 (1989) 279

Rainwater harvesting for the management of agricultural droughts in the foothills of northern India, 16 (1989) 309

Plant water relations and irrigation management, 17 (1990) 59

Importance of irrigation regime, dripline placement and row spacing in the drip irrigation of sugar cane, 17 (1990) 75

Plant-water relations of sugar cane (Saccharum officinarum L.) under a range of irrigated treatments, 17 (1990) 95

The tolerance of sugarcane to water stress during its main development phases, 17 (1990) 117

The control of drip irrigation of sugarcane using 'index' tensiometers: some comparisons with control by the water budget method, 17 (1990) 180

Use of pan evaporation for estimating the total dose and programming the irrigation of sugarcane, 17 (1990) 209

Response of selected legume companion crops to irrigation frequencies, 17 (1990) 257

Influence of drip irrigation emission rate on distribution and drainage of water beneath a sugar cane and a fallow plot, 17 (1990) 267

Canopy temperature as an indicator of differential water use and yield performance among wheat cultivars, 18 (1990) 35

Water use and yield relationships of irrigated potato, 18 (1990) 173

Effect of intermittent irrigation on groundwater table contribution, irrigation requirement and yield of rice in Mollisols of the Tarai Region, 18 (1990) 231

Effect of irrigation scheduling on growth, yield and evapotranspiration of wheat in sodic soils, 18 (1990) 267

Water use of a winter wheat cultivar (Triticum aestivum), 19 (1991) 77

Crop water stress index for seed alfalfa: influences of within-season changes in plant morphology, 19 (1991) 135

Effect of evapotranspiration underprediction on irrigation scheduling and yield of corn: a simulation study, 19 (1991) 167

Effect of varying water regimes on soil physical properties and yield of rice in mollisols of Tarai region, 20 (1991) 71

Solute movement during intermittent water flow in a field soil and some implications for irrigation and fertilizer application, 20 (1991) 119

Supplementary irrigation for sequential cropping in the Ethiopian highland vertisols using broadbed and furrow land management system, 20 (1991) 173

Simulated effects of irrigation management in groundwater contamination, 20 (1992) 281

Effect of water regime on yield of drip irrigated first ration cane intercropped with maize and

groundnut, 22 (1992) 281

Water and energy conservation using irrigation scheduling with center-pivot irrigation systems, 22 (1992) 325

Water management strategy for increasing monsoon rice production in Bangladesh, 22 (1992) 335

Scheduling irrigation for peanuts with variable amounts of available water, 23 (1993) 1

Effect of irrigation on growth, yield and evapotranspiration of mustard (*Brassica juncea*) in partially reclaimed sodic soils, 23 (1993) 225

Water conservation through irrigation scheduling under arid climatic conditions, 24 (1993) 251

Irrigation effects on growth and water use of Quercus virginiana (Mill.) on a Texas lignite surface-mined site, 24 (1993) 265

Using water of marginal quality for crop production: major issues, 25 (1994) 233

Irrigation with poor quality water (Review), 25 (1994) 271

1.4. Design and construction

Advance-recession curve (length, phase, time)

Derivation of shape factors for border irrigation advance, 2 (1980) 271

Design of a farm layout for irrigation with limited discharges, 3 (1980) 143

Evaluation of infiltration measurements for border irrigation, 3 (1981) 251

A design procedure for closed end irrigation borders, 5 (1982) 1

Evaluating infiltration for border irrigation models, 5 (1982) 159

Comparison and selection of furrow irrigation models, 9 (1984) 105

Solution of the kinematic-wave equations for border irrigation, 9 (1984) 127

A quasi-steady state integral model for closed-end border irrigation, 11 (1986) 39

Variance of water advance in wide-spaced furrow irrigation, 16 (1989) 5

Effects of recession criteria on prediction of recession times in border irrigation models, 21 (1992) 167

Determination of infiltration characteristics by volume balance for border check irrigation, 23 (1993) 23

Estimating furrow infiltration, 24 (1993) 281

Effect of flow fluctuations on free draining, sloping furrow and border irrigation systems, 24 (1993) 299

Canal flow

Water conveyance in channels with semicircular cross sections, 13 (1988) 273

Roughness coefficients of watercourses revetted with half-circular concrete pipes. Results of field measurements in watercourse S 333 at Maarkedal, 19 (1991) 17

Canal lining

Optimum decisions for lining irrigation canal distribution networks, 2 (1979) 217

Design procedure

Design of a farm layout for irrigation with limited discharges, 3 (1980) 143

Design procedure of sprinkling laterals: the mathematical background of a computerized aid, 3 (1981) 269

A design procedure for closed end irrigation borders, 5 (1982) 1

Technical and economic considerations in the design of closed conduit irrigation systems: a case study, 5 (1982) 15

Analysis of basin irrigation performance with variable inflow rate, 5 (1982) 295

Furrow irrigation design for vertisols, 9 (1984) 211

Planning of irrigation distribution and application systems by mixed-integer linear programming, 10 (1985) 265

Analysis and design of gated irrigation pipelines, 12 (1986) 99

Farm unit

Fie.' verification of a microcomputer irrigation model, 21 (1992) 215

Gated pipe

Analysis and design of gated irrigation pipelines, 12 (1986) 99

Adopting water-conserving irrigation technology: the case of surge irrigation in Arizona, 18 (1990) 15

Irrigation network design

Issues in irrigation, 22 (1992) 3

Irrigation planning

Issues in irrigation, 22 (1992) 3

Leveling

The economics of precision land levelling: a case study from Pakistan, 1 (1978) 319

Effect of field levelling quality on irrigation efficiency and crop yield, 4 (1981) 457

On-farm water management

Evaluation of water management systems in a tubewell irrigated farm, 2 (1979) 67

Microcomputer for on-line control and operation of closed-conduit irrigation systems: an economical assessment, 16 (1989) 137

Impact of on-farm water management research on the performance of a gravity irrigation system in Bangladesh, 23 (1993) 11

Porous pipe

Emission characteristics of porous tubing, 15 (1988) 197

Project water distribution

Crop production functions and the allocation and use of irrigation water, 3 (1980) 53

An economic evaluation of sugar cane production under different water supply systems in Thailand, 13 (1988) 83 Issues in irrigation, 22 (1992) 3

Roughness coefficient (surface roughness)
Shallow flow of water through non-submerged vegetation, 8 (1984) 375

Comparison and selection of furrow irrigation models, 9 (1984) 105

Estimation of Manning's roughness coefficient for basin and border irrigation, 18 (1990) 29

Flood flow through tall vegetation, 18 (1990) 317 Roughness coefficients of watercourses revetted with half-circular concrete pipes. Results of field measurements in watercourse S 333 at Maarkedal, 19 (1991) 17

Tertiary unit (water course command area)

Computerized scheduling for irrigation management and pumping operations in the watercourse command, 18 (1990) 1

Simulation of tertiary unit efficiencies in large irrigation systems, 21 (1992) 13

Modelling irrigation deliveries for tertiary units in large irrigation systems, 21 (1992) 197

Water wheel

Discharge and mechanical efficiency of Egyptian water wheels, 20 (1991) 135

1.5. Monitoring, operation and maintenance

Emitter clogging

Trickle irrigation water quality and preventive maintenance, 2 (1979) 149

Trickle irrigation: emitter clogging and other flow problems, 3 (1981) 159

Filter feeding fish

The effect of filter feeding fish on water quality in irrigation reservoirs, 22 (1992) 369

Flow measurement

The use of long-throated flumes to measure flows in irrigation and drainage canals, 1 (1977) 111 Details of the flow and bottom pressure downstream of a thin-plate weir, 13 (1988) 369

Flume

The use of long-throated flumes to measure flows in irrigation and drainage canals, 1 (1977) 111

Irrigation efficiency (water saving)

Evaluation of water management systems in a tubewell irrigated farm, 2 (1979) 67

Effect of field levelling quality on irrigation efficiency and crop yield, 4 (1981) 457

Irrigation water conservation by using widespaced furrows, 5 (1982) 309

A Pearson distribution model describing sprinkler irrigation efficiency, 9 (1985) 325

Performance irrigation parameters and their relationship to surface-irrigation design variables and yield, 10 (1985) 159

Effects of alternate-furrow irrigation: water conservation on the yields of two soybean cultivars, 10 (1985) 253

Within-row irrigation saves water on croplands, 11 (1986) 31

Water losses through the bunds of irrigated rice fields interpreted through an analogue model, 11 (1986) 59

Interrelationships of performance parameters for irrigation borders, 12 (1987) 221

A review of methods for evaluating the economic efficiency of irrigation, 12 (1987) 231

Water management plan for the Al-Hassa Irrigation and Drainage Project in Saudi Arabia, 13 (1988) 185

Yield variability and water use in wide-spaced furrow irrigation, 16 (1989) 15

Irrigation research, development and practice in Mauritius, 17 (1990) 129

Operation diagrams for irrigation management, 18 (1990) 289

A comparison between drip and furrow irrigation in cotton at two levels of water supply, 19 (1991) 313

Simulation of tertiary unit efficiencies in large irrigation systems, 21 (1992) 13

Water conservation through irrigation scheduling under arid climatic conditions, 24 (1993) 251

Irrigation management

Issues in irrigation, 22 (1992) 3

Irrigation water quality

Trickle irrigation water quality and preventive maintenance, 2 (1979) 149

The effect of organic manuring and water quality on water transmission parameters and sodication of a sandy loam soil, 2 (1979) 163

Osmotoc potentials of roots of onions and their rhizospheric soil solutions when irrigated with saline drainage waters (Short Communications), 3 (1981) 317

Response of tall fescue to irrigation water salinity, leaching fraction, and irrigation frequency, 7 (1983) 439

Irrigation with brackish water under desert conditions, I. Problems and solutions in production of onions (Allium Cepa L.), 9 (1984) 225

Irrigation with brackish water under desert conditions, II. Physiological and yield response of maize (Zea Mays) to continuous irrigation with brackish water and to alternating brackishfresh-brackish water irrigation, 10 (1985) 47

Water quantity and quality requirements of guayule: current assessment, 10 (1985) 205

Salinity control in multi-quality irrigation networks — Kibbutz Hamadia feasibility study, 10 (1985) 235

Irrigation with brackish water under desert conditions, III. Methods for achieving good germination under sprinkler irrigation with brackish water, 10 (1985) 335

Improvement of irrigation water by gypsum beds, 11 (1986) 293

Irrigation with brackish water under desert conditions, IV. Salt tolerance studies with lettuce (Lactuca sativa L.), 11 (1986) 303

Irrigation with brakish water under desert conditions, V. Nitrogen requirement of tomatoes (Lycopersicon esculentum Mill.) during germination under drip irrigation, 11 (1986) 313

Irrigation with brackish water under desert conditions, VI. Automated systems to produce a range of salt concentrations in irrigation water for experimental plots, 12 (1986) 137

Irrigation with brackish water under desert conditions, VII. Effect of time of application of brackish water on production of processing tomatoes (Lycopersicon esculentum Mill.), 12 (1986) 149

Importance of calcium in irrigation with salinesodic water — a viewpoint, 12 (1987) 207 Use of saline drainage water for irrigation: Imperial Valley study, 16 (1989) 25

Irrigation with brackish water under desert conditions, VIII. further studies on Onion (Allium cepa L.) production with brackish water, 16 (1989) 201

The reticulation of ethanol stillage through irrigation systems and its use for fertilisation of sugarcane in Zimbabwe, 17 (1990) 49

A regional approach to salinity management in river basins. A case study in southern Iran, 19 (1991) 27

Production functions relating crop yield, water quality and quantity, soil salinity and drainage volume, 19 (1991) 51

Response of wheat to irrigation with saline water varying in anionic constituents and phosphorus application, 20 (1991) 223

Effect of high salinity and SAR waters on salinization, sodication and yields of pearl-millet and wheat, 21 (1992) 93

Conjunctive use of saline and non-saline waters, 1. Response of wheat to initial salinity profiles and salinisation patterns, 23 (1993) 125

Conjunctive use of saline and non-saline waters, 11. Field comparisons of cyclic uses and mixing for wheat, 23 (1993) 139

Effect of saline water on soil salinity and on water stress, growth, and yield of wheat and potatoes, 23 (1993) 247

Decision support for irrigation system improvement in saline environment, 23 (1993) 285

Irrigation with brackish water under desert conditions. IX. The salt tolerance of six forage crops, 24 (1993) 321

Effect of saline water on establishment of windbreak trees, 25 (1994) 35

Field determined hydraulic properties of a sandy loam soil irrigated with various salinity and SAR waters, 25 (1994) 97

Using water of marginal quality for crop production: major issues, 25 (1994) 233

Irrigation with poor quality water (Review), 25 (1994) 271

Uniformity (distribution uniformity, irrigation water distribution, infiltration uniformity)

Uniform irrigation with a low-head bubbler system, 1 (1977) 167

A Pearson distribution model describing sprinkler irrigation efficiency, 9 (1985) 325

Performance irrigation parameters and their relationship to surface-irrigation design variables and yield, 10 (1985) 159

Economic evaluation of salinity, drainage and non-uniformity of infiltrated irrigation water, 10 (1985) 221

Evaluating continuous-move sprinkler machines using time-series statistics, 12 (1986) 87

Interrelationships of performance parameters for irrigation borders, 12 (1987) 221

Optimizing the uniformity of irrigation and fertilization, 13 (1988) 285

A systems approach to drainage reduction in the San Joaquin Valley, 16 (1989) 97

Potential economic returns to improved irrigation infiltration uniformity, 18 (1990) 253

Cotton response to nonuniform and varying depths of irrigation, 19 (1991) 151

Irrigation uniformity of level basins as influenced by variations in soil water content and surface elevation, 19 (1991) 325

The distortion by wind of the distribution patterns of single sprinklers, 19 (1991) 341

Losses from low-pressure center-pivot irrigation systems in a desert climate as affected by nozzle height, 21 (1992) 23

Effect of flow fluctuations on free draining, sloping furrow and border irrigation systems, 24 (1993) 299

Water mixing

Salinity control in multi-quality irrigation networks — Kibbutz Hamadia feasibility study, 10 (1985) 235

Irrigation with brackish water under desert conditions, VI. Automated systems to produce a range of salt concentrations in irrigation water for experimental plots, 12 (1986) 137

Intercepting, isolating and reusing drainage waters for irrigation to conserve water and protect water quality, 16 (1989) 37

Irrigation of wheat with saline drainage water on a sandy loam soil, 19 (1991) 223

Conjunctive use of saline and non-saline waters, I. Response of wheat to initial salinity profiles and salinisation patterns, 23 (1993) 125

Conjunctive use of saline and non-saline waters, II. Field comparisons of cyclic uses and mixing for wheat, 23 (1993) 139

Weir

The use of long-throated flumes to measure flows in irrigation and drainage canals, 1 (1977) 111

A flow-proportional water sampler for use in conjunction with a V-notch weir in small catchment studies, 13 (1988) 93 Details of the flow and bottom pressure downstream of a thin-plate weir, 13 (1988) 369

1.6. Socio-economic aspects

Health effect

Irrigation and global water outlook, 25 (1994) 221

International watercompetition

International competition for water and motivations for dispute resolution, 21 (1992) 3 Irrigation and global water outlook, 25 (1994) 221

Irrigation development

Problems of irrigated agriculture in Al-Hassa, Saudi Arabia, 5 (1982) 359

Future of irrigation in balanced third world development, 21 (1992) 33

Issues in irrigation, 22 (1992) 3

Irrigation - a blessing or a curse, 25 (1994) 203

Irrigation effect (economic evaluation, appraisal, benefit of irrigation)

Requirements for the successful introduction and management of rotational irrigation, 1 (1976) 41

The economics of precision land levelling: a case study from Pakistan, 1 (1978) 319

Economics of irrigation and the institutional and pricing systems of water in Israel, 2 (1979) 203

Crop production functions and the allocation and use of irrigation water, 3 (1980) 53

Choosing optimal design depth for surface irrigation systems, 6 (1983) 335

Economic evaluation of salinity, drainage and non-uniformity of infiltrated irrigation water, 10 (1985) 221

A review of methods for evaluating the economic efficiency of irrigation, 12 (1987) 231

An economic evaluation of sugar cane production under different water supply systems in Thailand, 13 (1988) 83

Irrigation project appraisal: outline of principles, 13 (1988) 359

Microcomputer for on-line control and operation of closed-conduit irrigation systems: an economical assessment, 16 (1989) 137

A comparative study of the financial and economic viability of drip and overhead irrigation of sugarcane in Mauritius, 17 (1990) 307

Computerized scheduling for irrigation management and pumping operations in the watercourse command, 18 (1990) 1 Adopting water-conserving irrigation technology: the case of surge irrigation in Arizona, 18 (1990) 15

Potential economic returns to improved irrigation infiltration uniformity, 18 (1990) 253

Economic evaluation of the transition from a traditional to a modernized irrigation project, 18 (1990) 347

Issues in irrigation, 22 (1992) 3

Econometric consideration for reuse of drainage effluent in wheat production, 22 (1992) 249

Water and energy conservation using irrigation scheduling with center-pivot irrigation systems, 22 (1992) 325

Water management strategy for increasing monsoon rice production in Bangladesh, 22 (1992) 335

Impact of on-farm water management research on the performance of a gravity irrigation system in Bangladesh, 23 (1993) 11 Irrigation — a blessing or a curse, 25 (1994) 203

Irrigation management

Irrigation — a blessing or a curse, 25 (1994) 203

Socio-economic evaluation

Economic and social perspectives on new irrigation technology, 17 (1990) 283

The organisation of Malawi's small holder sugar production under irrigation, 17 (1990) 295

Small holder irrigated cane in the Kano Plains of Kenya, 17 (1990) 301

The problems of running an efficient irrigation system on a small holder project, 17 (1990) 319

Sustainability

Irrigation - a blessing or a curse, 25 (1994) 203

Water pricing

Economics of irrigation and the institutional and pricing systems of water in Israel, 2 (1979) 203

Modelling derived demand for irrigation water, 13 (1988) 403

Irrigation water pricing policies to reduce and finance subsurface drainage disposal, 16 (1989) 155

Issues in irrigation, 22 (1992) 3

Water resource management

Irrigation and global water outlook, 25 (1994) 221

Water user's association

Requirements for the successful introduction and management of rotational irrigation, 1 (1976) 41

Water control and the maintenance imperative: evidence from Nepal, 15 (1988) 115 Issues in irrigation, 22 (1992) 3

2. Drainage

2.1. Method

Drainage

The role of adapted farming in the solution of drainage problems on basin clay soils, 2 (1980) 257

Problems of irrigated agriculture in Al-Hassa, Saudi Arabia, 5 (1982) 359

Drainage problems in mountainous areas, 14 (1988) 169

Interceptor drainage

Management of sandplain seeps in the wheatbelt of Western Australia, 19 (1991) 85

Mole drainage

Determination of the variation of hydraulic conductivity with depth in drained lands and the design of drainage installations, 1 (1976) 57

The minimum size of permeable fill used with mole drainage, 1 (1977) 143

Functioning of mole drains in a clay soil, 6 (1983) 27

A heuristic model of soil water regimes in clay soils in the presence of mole drainage, 6 (1983) 191

Effect of mole submergence on the life of mole channels, 8 (1984) 361

Note on A.C. Armstrong's heuristic model of soil water regimes in clay soils in the presence of mole drainage (Comments), 9 (1984) 157

An analysis of the effect of the vertical fissuring in mole-drained soils on drain performances, 9 (1985) 301

Influence on streamflow of field drainage in a small agricultural catchment, 10 (1985) 145

Characteristics of mole drainage as a major ameliorative technique for surface-waterlogged soils, 13 (1988) 307

Effects of moling and cultivation on soil-water and runoff from a drained clay soil, 23 (1993) 161

Subsurface (pipe, tile) drainage

Determination of the variation of hydraulic conductivity with depth in drained lands and the design of drainage installations, 1 (1976) 57 Subsurface drainage results for over-wetted soils of the Latvian S.S.R., 2 (1979) 55

Drainage and desalinization of heavy clay soil in Portugal, 5 (1982) 227

Machinery for installation of small diameter pipes at shallow depths, 9 (1984) 23

Effects of drainage on crops and farm management, 14 (1988) 3

Effects of subsurface drainage on heavy hydromorphic soil in the Nelindvor area, Yugoslavia, 14 (1988) 19

Watertable control, reuse and disposal of drainage water in Haryana, 14 (1988) 537

Rainfall probability forecasts used to manage a subdrainage-subirrigation system for watertable control, 15 (1988) 47

Surface and subsurface drainage simulations for a claypan soil, 15 (1989) 211

Simulation of controlled drainage in open-ditch drainage systems, 18 (1990) 301

Cost effectiveness of soil investigations for pipe drainage projects, 18 (1990) 333

Physical and economic benefits of subsurface drainage by soil type in eastern Ontario, 19 (1991) 235

A modified layout of the subsurface drainage system for rice areas in the Nile Delta, Egypt, 19 (1991) 289

Desalinization with subsurface drainage, 19 (1991) 303

Testing of a field scale drainage model on subsurface-drained farmlands, 20 (1991) 29

Investigations about the optimum depth of drains in loamy soils in Latvia, 24 (1993) 83

Surface drainage

The role of adapted farming in the solution of drainage problems on basin clay soils, 2 (1980) 257

Surface and subsurface drainage simulations for a claypan soil, 15 (1989) 211

Simulation of controlled drainage in open-ditch drainage systems, 18 (1990) 301

Testing of a field scale drainage model on subsurface-drained farmlands, 20 (1991) 29

Supplementary irrigation for sequential cropping in the Ethiopian highland vertisols using broadbed and furrow land management system, 20 (1991) 173

Trenchless drainage

A method to predict changes in hydraulic conductivity caused by drainage plows and backfilling of trenches, 2 (1979) 11

2.2. Design and construction

Drainage criteria

Effects of drainage on crops and farm management, 14 (1988) 3

Watertable control indices for drainage of agricultural land in humid climates, 14 (1988) 69

Agricultural criteria for subsurface drainage: a systems analysis, 14 (1988) 79

Drainage criteria for heavy soils with a shallow impervious layer, 14 (1988) 91

Methods to determine the need for drainage in flat areas, 14 (1988) 97

Water management and drainage design of a selected polder, 14 (1988) 103

Sensitivity of agricultural drainage systems to changes in climatic inputs, 21 (1992) 57

Drainage equation

A comparison of steady-state land-drainage equations, 9 (1984) 1

Use of the Hooghoudt formula for drain spacing calculations in homogeneous-anisotropic soils, 10 (1985) 283

Watertable heights in drained anisotropic homogeneous soils, 11 (1986) 1

Non-dimensional diagrams for unsteady drainage problems with or without recharge, 13 (1988) 145

Effects of drainage on crops and farm management, 14 (1988) 3

Linear and nonlinear solution of the Boussinesq equation for the bi-level drainage problem, 16 (1989) 269

A solution in closed form and a series solution to replace the tables for the thickness of the equivalent layer in Hooghoudt's drain spacing formula, 19 (1991) 1

Modified steady state drainage equations for transient conditions in subsurface drainage, 20 (1992) 329

Drain depth

Subsurface drainage results for over-wetted soils of the Latvian S.S.R., 2 (1979) 55

Derivation of cost-minimizing depth for lateral pipe drains, 12 (1986) 41

Investigations about the optimum depth of drains in loamy soils in Latvia, 24 (1993) 83

Drain machinery

Machinery for installation of small diameter pipes at shallow depths, 9 (1984) 23 Productive capacity of trenching and trenchless machines when laying subsurface drains, 21 (1992) 45

Drain spacing

Subsurface drainage results for over-wetted soils of the Latvian S.S.R., 2 (1979) 55

Field estimation of the spacing of parallel drainage ditches, 20 (1991) 203

Investigations about the optimum depth of drains in loamy soils in Latvia, 24 (1993) 83

Filter envelope (drain filter)

Effect of perforation and filter material on entrance resistance and effective diameter of plastic drain pipes, 2 (1979) 1

The hydraulic effect of filter materials around gappy non-ideal field drains, 3 (1980) 17

Factors affecting the performance of drainage envelope materials in structurally unstable soils, 5 (1982) 215

Entrance resistance of enveloped drainage pipes, 8 (1984) 351

Effects of subsurface drainage on heavy hydromorphic soil in the Nelindvor area, Yugoslavia, 14 (1988) 19

Enhancement of crop yields from subsurface drains with various envelopes, 15 (1988) 131

Effect of radial soil heterogeneity around a subsurface drain on the watertable height computed using a finite element model, 20 (1991) 47

Pipe perforation

Effect of perforation and filter material on entrance resistance and effective diameter of plastic drain pipes, 2 (1979) 1

The hydraulic effect of filter materials around gappy non-ideal field drains, 3 (1980) 17

Effect of perforation shape and pattern on the performance of drain pipes, 4 (1981) 429

Trench backfill

The minimum size of permeable fill used with mole drainage, 1 (1977) 143

A method to predict changes in hydraulic conductivity caused by drainage plows and backfilling of trenches, 2 (1979) 11

2.3. Monitoring, operation and maintenance

Drain discharge

A design-discharge calculation method based on the parallel use of reservoir models, 5 (1982) 205 Water management and drainage design of a selected polder, 14 (1988) 103

Field drainage and land management, a comparison of four long term field trials, 14 (1988) 113

The hydrological response of a silty clay loam following drainage treatment, 14 (1988) 125

Drainage hydrology in the marshlands of western France, 14 (1988) 175

Effect of swelling and shrinkage on the calculation of water balance and water transport in clay soils, 14 (1988) 185

Testing of a field scale drainage model on subsurface-drained farmlands, 20 (1991) 29

Toward optimal land drainage pumping, 23 (1993)

Investigations about the optimum depth of drains in loamy soils in Latvia, 24 (1993) 83

Drainwater sampler

A flow-proportional water sampler for use in conjunction with a V-notch weir in small catchment studies, 13 (1988) 93

Drain silting (deposit, sedimentation)

Erosion deposits in tile-drains, 1 (1978) 311

Effect of radial soil heterogeneity around a subsurface drain on the watertable height computed using a finite element model, 20 (1991)

Entrance resistance

Effect of perforation and filter material on entrance resistance and effective diameter of plastic drain pipes, 2 (1979) 1

Effect of perforation shape and pattern on the performance of drain pipes, 4 (1981) 429

Entrance resistance of enveloped drainage pipes, 8 (1984) 351

Effect of different parameters on entrance resistance of corrugated plastic drains, 13 (1988) 225

Ochre clogging

Avoiding ochre deposits in soil drainage pipes, 10 (1985) 327

Outlet submergence

Effect of mole submergence on the life of mole channels, 8 (1984) 361

Pumping station efficiency

Toward optimal land drainage pumping, 23 (1993) 51

2.4. Reuse and disposal

Drainwater disposal

Economic evaluation of salinity, drainage and non-uniformity of infiltrated irrigation water, 10 (1985) 221

Reuse and disposal of higher salinity subsurface drainage water — a review, 14 (1988) 483

Watertable control, reuse and disposal of drainage water in Haryana, 14 (1988) 537

Irrigation water pricing policies to reduce and finance subsurface drainage disposal, 16 (1989) 155

Drainwater quality

Reducing water quality degradation through minimized leaching management, 1 (1977) 127

Minimizing salt in drain water by irrigation management. Design and initial results of Arizona field studies, 1 (1978) 233

Dissolved inorganic nitrogen and phosphate concentration in discharge from two agricultural catchments in eastern Ontario, 5 (1982) 29

Removal of nitrogen and phosphorus from untreated milking-shed wastes after application to permanent pasture, 5 (1981) 181

Minimizing salt in drain water by irrigation management — Arizona field studies with citrus, 9 (1984) 61

Minimizing salt in drain water by irrigation management — leaching studies with alfalfa, 9 (1984) 89

Calculating the quality of drainage water from non-homogeneous soil profiles with an extension to an unsaturated-saturated groundwater quality model including bypass flow, 10 (1985) 293

Effect of upland pasture improvement on nutrient release in flows from a 'natural' lysimeter and a field drain, 11 (1986) 231

Reuse and disposal of higher salinity subsurface drainage water — a review, 14 (1988) 483

Use of saline drainage water for irrigation: Imperial Valley study, 16 (1989) 25

Land use changes and inputs of nitrogen to Loch Leven, Scotland: a desk study, 16 (1989) 119

Irrigation of wheat with saline drainage water on a sandy loam soil, 19 (1991) 223

Drainwater reuse

Water management plan for the Al-Hassa Irrigation and Drainage Project in Saudi Arabia, 13 (1988) 185

Reuse and disposal of higher salinity subsurface drainage water — a review, 14 (1988) 483

The Tongola groundwater pumping/re-use project: a pilot study for groundwater table control in the Shepparton region in northern Victoria, 14 (1988) 513

Watertable control, reuse and disposal of drainage water in Haryana, 14 (1988) 537

Use of saline drainage water for irrigation: Imperial Valley study, 16 (1989) 25

Intercepting, isolating and reusing drainage waters for irrigation to conserve water and protect water quality, 16 (1989) 37

A systems approach to drainage reduction in the San Joaquin Valley, 16 (1989) 97

Irrigation of wheat with saline drainage water on a sandy loam soil, 19 (1991) 223

Econometric consideration for reuse of drainage effluent in wheat production, 22 (1992) 249

Evaporation basin

South Australia's approach to salinity management in the River Murray, 4 (1981) 335

Economic evaluation of salinity, drainage and non-uniformity of infiltrated irrigation water, 10 (1985) 221

Reuse and disposal of higher salinity subsurface drainage water — a review, 14 (1988) 483

Sewage reuse

Irrigation and global water outlook, 25 (1994) 221

2.5. Socio-economic aspects

Drainage effect (benefit)

Subsurface drainage results for over-wetted soils of the Latvian S.S.R., 2 (1979) 55

The role of adapted farming in the solution of drainage problems on basin clay soils, 2 (1980) 257

Effects of drainage on crops and farm management, 14 (1988) 3

Effects of subsurface drainage on heavy hydromorphic soil in the Nelindvor area, Yugoslavia, 14 (1988) 19

Effect of watertable depth and waterlogging on crop yield, 14 (1988) 29

Effect of watertable on yield and root depth of winter wheat in the French West Central Atlantic Marshlands, 14 (1988) 35

Drainage benefits: watertable control, workability and crop yields, 14 (1988) 43

The French Programme of Drainage Reference Areas. Methodology and first results, 14 (1988) 53

Drainage and crop production system on intensive dairy farms in western France, 14 (1988) 61 Watertable control indices for drainage of agricultural land in humid climates, 14 (1988) 69

Agricultural criteria for subsurface drainage: a systems analysis, 14 (1988) 79

Enhancement of crop yields from subsurface drains with various envelopes, 15 (1988) 131

Estimating the value of flood alleviation on agricultural grassland, 15 (1988) 141

A model for investment appraisal of grassland drainage schemes on farms in the U.K., 18 (1990) 101

Physical and economic benefits of subsurface drainage by soil type in eastern Ontario, 19 (1991) 235

Estimating agricultural benefits from drainage over a relatively level terrain, 21 (1992) 79

3. Soil, soilwater and groundwater

3.1. Soil

Anisotropy

Convective transport of solutes by steady flows, I. General theory, 1 (1978) 201

Use of the Hooghoudt formula for drain spacing calculations in homogeneous-anisotropic soils, 10 (1985) 283

Watertable heights in drained anisotropic homogeneous soils, 11 (1986) 1

Clay soil (heavy clay soil, vertisoil)

Determination of the variation of hydraulic conductivity with depth in drained lands and the design of drainage installations, 1 (1976) 57

Drainage and vertical hydraulic conductivity of some Dutch 'knik' clay soils, 1 (1976) 67 Erosion deposits in tile-drains, 1 (1978) 311

Effect of vertical mulch on moisture conservation and yield of sorghum in vertisols, 1 (1978) 333

The role of adapted farming in the solution of drainage problems on basin clay soils, 2 (1980)

Drainage and desalinization of heavy clay soil in Portugal, 5 (1982) 227

Functioning of mole drains in a clay soil, 6 (1983)

A heuristic model of soil water regimes in clay soils in the presence of mole drainage, 6 (1983)

Seasonal variations in nitrate leaching in structured clay soils under mixed land use, 7 (1983) 391 Machinery for installation of small diameter pipes at shallow depths, 9 (1984) 23

Nitrogen leaching during sprinkler irrigation of a Dutch clay soil, 9 (1984) 37

Supplemental irrigation of bananas in St. Lucia, 9 (1984) 149

Note on A.C. Armstrong's heuristic model of soil water regimes in clay soils in the presence of mole drainage (Comments), 9 (1984) 157

Furrow irrigation design for vertisols, 9 (1984) 211

Field evidence for a bi-porous soil water regime in clay soils, 11 (1986) 117

Effects of catchment management on runoff, water quality and yield potential from vertisols, 12 (1986) 1

Effects of subsurface drainage on heavy hydromorphic soil in the Nelindvor area, Yugoslavia, 14 (1988) 19

Drainage criteria for heavy soils with a shallow impervious layer, 14 (1988) 91

Effect of swelling and shrinkage on the calculation of water balance and water transport in clay soils, 14 (1988) 185

Determining percolation losses of packed clay soil from tensiometer data, 15 (1988) 189

Supplementary irrigation for sequential cropping in the Ethiopian highland vertisols using broadbed and furrow land management system, 20 (1991) 173

Infiltration characteristics of some clayey soils measured during border irrigation, 21 (1992)

Determination of infiltration characteristics by volume balance for border check irrigation, 23 (1993) 23

Effects of moling and cultivation on soil-water and runoff from a drained clay soil, 23 (1993) 161

Application of the model MACRO to water movement and salt leaching in drained and irrigated marsh soils, Marismas, Spain, 25 (1994) 71

Development of a regression-based model of border irrigation on cracking soils, 25 (1994) 167

Clay pan (hard pan) soil

Preferential flow influences on drainage of shallow sloping soils, 14 (1988) 137

A simple model for flow on hillslopes, 14 (1988) 153

Surface and subsurface drainage simulations for a claypan soil, 15 (1989) 211

Hydraulic conductivity

Determination of the variation of hydraulic conductivity with depth in drained lands and the design of drainage installations, 1 (1976) 57

A method to predict changes in hydraulic conductivity caused by drainage plows and backfilling of trenches, 2 (1979) 11

Effect of mixed cation solutions on hydraulic soil properties, 6 (1983) 15

Use of soil survey data to select measurement techniques for hydraulic conductivity, 6 (1983) 177

Spatial variation of hydraulic conductivity of deeply weathered soils in Western Australia, 6 (1983) 291

Variation in evapotranspiration and capillary rise with changing soil profile characteristics, 13 (1988) 297

Modelling watertable movement in drained soils with depth-dependent hydraulic conductivity, 20 (1991) 101

Optimal sampling density of hydraulic conductivity for subsurface drainage in the Nile Delta, 20 (1992) 299

Hydraulic soil properties

The effect of organic manuring and water quality on water transmission parameters and sodication of a sandy loam soil, 2 (1979) 163

Analyzing field-measured soil-water properties, 6 (1983) 93

Description of nitrogen movement in the presence of spatially variable soil hydraulic properties, 6 (1983) 227

A critical assessment of the role of measured hydraulic properties in the simulation of absorption, infiltration and redistribution of soil water, 15 (1988) 73

Determining percolation losses of packed clay soil from tensicmeter data, 15 (1988) 189

Field determined hydraulic properties of a sandy loam soil irrigated with various salinity and SAR waters, 25 (1994) 97

Macropore (bypass, fissure)

Soil morphology and preferential flow along macropores, 3 (1981) 235

Obtaining soil physical field data for simulating soil moisture regimes and associated potato growth, 5 (1982) 319

An analysis of the effect of the vertical fissuring in mole-drained soils on drain performances, 9 (1985) 301 Field evidence for a bi-porous soil water regime in clay soils, 11 (1986) 117

Preferential flow influences on drainage of shallow sloping soils, 14 (1988) 137

Effect of swelling and shrinkage on the calculation of water balance and water transport in clay soils, 14 (1988) 185

Determination of infiltration characteristics by volume balance for border check irrigation, 23 (1993) 23

Rootzone processes and the efficient use of irrigation water (Review), 25 (1994) 1

Application of the model MACRO to water movement and salt leaching in drained and irrigated marsh soils, Marismas, Spain, 25 (1994) 71

Physical soil properties

Spatial variability of physical soil properties influencing the temperature of the soil surface, 6 (1983) 213

Regional field study of the spatial variability of selected soil physical properties, 6 (1983) 269

Prediction of soil moisture characteristics from mechanical analysis and bulk density data, 10 (1985) 305

Effect of variations in soil properties and precipitation on micro-catchment water balance, 12 (1987) 177

Effect of varying water regimes on soil physical properties and yield of rice in mollisols of Tarai region, 20 (1991) 71

Using water of marginal quality for crop production: major issues, 25 (1994) 233

Irrigation with poor quality water (Review), 25 (1994) 271

Porosity

Heterogeneity and representativity of sampling in the study of soil microstructure by the mercury intrusion method, 6 (1983) 203

Soil porosity in a peach orchard as influenced by watertable depth, 16 (1989) 63

The relation between soil infiltration and effective porosity in different soils, 24 (1993) 39

Sloping soil

Preferential flow influences on drainage of shallow sloping soils, 14 (1988) 137

A simple model for flow on hillslopes, 14 (1988)

Drainage problems in mountainous areas, 14 (1988) 169

Soil surface temperature

Spatial variability of physical soil properties influencing the temperature of the soil surface, 6 (1983) 213

Soil structure

Factors affecting the performance of drainage envelope materials in structurally unstable soils, 5 (1982) 215

Heterogeneity and representativity of sampling in the study of soil microstructure by the mercury intrusion method, 6 (1983) 203

The relation between soil infiltration and effective porosity in different soils, 24 (1993) 39

Soil texture

Prediction of soil moisture characteristics from mechanical analysis and bulk density data, 10 (1985) 305

The relation between soil infiltration and effective porosity in different soils, 24 (1993) 39

Spatial variation

Analyzing field-measured soil-water properties, 6 (1983) 93

Spatial variation in soil and the role of kriging, 6 (1983) 111

Problems of superimposed effects in the statistical study of the spatial variation of soil, 6 (1983) 123

Soil physical theory and heterogeneity, 6 (1983)

Implications of some analytical solutions for drainage of soil water, 6 (1983) 161

Use of soil survey data to select measurement techniques for hydraulic conductivity, 6 (1983) 177

Heterogeneity and representativity of sampling in the study of soil microstructure by the mercury intrusion method, 6 (1983) 203

Spatial variability of physical soil properties influencing the temperature of the soil surface, 6 (1983) 213

Description of nitrogen movement in the presence of spatially variable soil hydraulic properties, 6 (1983) 227

The variability of recharge of the English Chalk aquifer, 6 (1983) 243

Regional variability of soil characteristics for flood and low flow estimation, 6 (1983) 255

Regional field study of the spatial variability of selected soil physical properties, 6 (1983) 269

Scaling soil microhydrologic properties of Lakeland and Konawa soils using similar media concepts, 6 (1983) 277

Spatial variation of hydraulic conductivity of deeply weathered soils in Western Australia, 6 (1983) 291

The Meteorological Office Rainfall and Evaporation Calculation System — MORECS, 6 (1983) 297

A comparison of measured soil moisture deficits with those estimated by the Meteorological Office system, MORECS: a brief report, 6 (1983) 307

Evapotranspiration and soil heterogeneity, 8 (1984) 279

Surface temperature variability patterns within irrigated fields, 8 (1984) 429

Spatial variability of rainfall and yield of maize in a semi-arid region, 10 (1985) 13

Effect of variations in soil properties and precipitation on micro-catchment water balance, 12 (1987) 177

Stochastic approach of soil water flow through the use of scaling factors: measurement and simulation, 13 (1988) 249

Variation in evapotranspiration and capillary rise with changing soil profile characteristics, 13 (1988) 297

Treatment of spatially variable groundwater levels in one-dimensional stochastic unsaturated water-flow modelling, 15 (1988) 19

Effect of spatial variability on the estimation of the soluble salt content in a drip-irrigated saline loam soil, 15 (1989) 361

Variability of soil water tension and soil water content, 18 (1990) 135

Cost effectiveness of soil investigations for pipe drainage projects, 18 (1990) 333

Optimal sampling density of hydraulic conductivity for subsurface drainage in the Nile Delta, 20 (1992) 299

Statistical analyses of soil variability: effects of variability on level-basin irrigation of wheat, 21 (1992) 177

Sampling number and design for measurements of infiltration rates into puddled rice fields, 21 (1992) 281

Application of geostatistics to characterize spatial variability of infiltration in furrow irrigation, 25 (1994) 153

Swelling

Deep percolation during prolonged ponding of a swelling soil, and the effect of gypsum treatment, 2 (1979) 131

Effect of swelling and shrinkage on the calculation

of water balance and water transport in clay soils, 14 (1988) 185

Unsaturated hydraulic conductivity

Evaluation of the parameters involved in Gardner's relation between unsaturated hydraulic conductivity and soil water matric suction, 2 (1979) 25

In situ water transmission characteristics of a tropical soil under rice-based cropping systems, 8 (1984) 387

Evaluation of various computational schemes in calculating unsaturated hydraulic conductivity., 13 (1988) 317

Seasonal water balance of a sandy soil in Niger cropped with pearl millet, based on profile moisture measurements, 21 (1992) 313

Vertical hydraulic conductivity

Drainage and vertical hydraulic conductivity of some Dutch 'knik' clay soils, 1 (1976) 67

Workability

An integrated model-approach to the effect of water management on crop yield, 1 (1976) 3

Effects of drainage on crops and farm management, 14 (1988) 3

Effects of subsurface drainage on heavy hydromorphic soil in the Nelindvor area, Yugoslavia, 14 (1988) 19

Drainage benefits: watertable control, workability and crop yields, 14 (1988) 43

The French Programme of Drainage Reference Areas. Methodology and first results, 14 (1988) 53

Drainage and crop production system on intensive dairy farms in western France, 14 (1988) 61

Surface and subsurface drainage simulations for a claypan soil, 15 (1989) 211

3.2. Soilwater

Capillary rise (flow, flux)

Seasonal water use by winter wheat grown under shallow watertable conditions, 1 (1978) 263

Estimating watertable contribution to the water supply of maize, 11 (1986) 221

Desalinisation of recently accreted coastal land in the eastern part of the Bay of Bengal, Bangladesh, 13 (1988) 1

Improving irrigation management by modelling the irrigation schedule, 13 (1988) 113

Variation in evapotranspiration and capillary rise with changing soil profile characteristics, 13 (1988) 297 The influence of sub-soil on the moisture regime in irrigated fields, 14 (1988) 307

Evapotranspiration from wheat under a semi-arid climate and a shallow watertable, 23 (1993) 91

Infiltration (infiltration rate, water intake rate, infiltration characteristics, cumulative infiltration, infiltration equation)

Field infiltration indices in the evaluation of tillage practices, 1 (1976) 79

Effect of vertical mulch on moisture conservation and yield of sorghum in vertisols, 1 (1978) 333

Deep percolation during prolonged ponding of a swelling soil, and the effect of gypsum treatment, 2 (1979) 131

Design of a farm layout for irrigation with limited discharges, 3 (1980) 143

Evaluation of infiltration measurements for border irrigation, 3 (1981) 251

Design procedure of sprinkling laterals: the mathematical background of a computerized aid, 3 (1981) 269

A design procedure for closed end irrigation borders, 5 (1982) 1

Evaluating infiltration for border irrigation models, 5 (1982) 159

Runoff and soil loss from an oxisol in southeastern Nigeria under various management practices, 5 (1982) 193

Effect of exchangeable sodium percent on surface sealing, 11 (1986) 247

Effects of crop and surface irrigation method on water intake rate of soil, 12 (1987) 305

An optimization technique for estimating infiltration characteristics in border irrigation, 13 (1988) 13

A critical assessment of the role of measured hydraulic properties in the simulation of absorption, infiltration and redistribution of soil water, 15 (1988) 73

A rainfall simulator study of infiltration into arable soils, 21 (1992) 119

Infiltration characteristics of some clayey soils measured during border irrigation, 21 (1992) 265

Sampling number and design for measurements of infiltration rates into puddled rice fields, 21 (1992) 281

Development of a portable rainfall simulator infiltrometer for infiltration, runoff and erosion studies, 22 (1992) 235

Determination of infiltration characteristics by volume balance for border check irrigation, 23 (1993) 23 The relation between soil infiltration and effective porosity in different soils, 24 (1993) 39

Estimating furrow infiltration, 24 (1993) 281

Application of geostatistics to characterize spatial variability of infiltration in furrow irrigation, 25 (1994) 153

Percolation

Deep percolation during prolonged ponding of a swelling soil, and the effect of gypsum treatment, 2 (1979) 131

Trickle irrigation timing and its effect on plant and soil water status, 2 (1979) 225

Closed border irrigation evaluations, 9 (1984) 139 A Pearson distribution model describing sprinkler irrigation efficiency, 9 (1985) 325

Determining percolation losses of packed clay soil from tensiometer data, 15 (1988) 189

Influence of drip irrigation emission rate on distribution and drainage of water beneath a sugar cane and a fallow plot, 17 (1990) 267

Cotton response to nonuniform and varying depths of irrigation, 19 (1991) 151

Preferential flow (bypass flow)

Soil morphology and preferential flow along macropores, 3 (1981) 235

Systems approach to an unsaturated-saturated groundwater quality model, including adsorption, decomposition and bypass, 10 (1985) 193

Calculating the quality of drainage water from non-homogeneous soil profiles with an extension to an unsaturated-saturated groundwater quality model including bypass flow, 10 (1985) 293

Improving irrigation management by modelling the irrigation schedule, 13 (1988) 113

Preferential flow influences on drainage of shallow sloping soils, 14 (1988) 137

A simple model for flow on hillslopes, 14 (1988) 153

Effect of swelling and shrinkage on the calculation of water balance and water transport in clay soils, 14 (1988) 185

Significance of soil survey for agrohydrological studies, 14 (1988) 195

Rootzone processes and the efficient use of irrigation water (Review), 25 (1994) 1

Recharge

Groundwater recharge under alkali soils during reclamation, 5 (1982) 51

The variability of recharge of the English Chalk aquifer, 6 (1983) 243

Groundwater recharge in Schleswig-Holstein (West-Germany), 14 (1988) 339

Irrigation and global water outlook, 25 (1994) 221

Soilwater characteristics

Prediction of soil moisture characteristics from mechanical analysis and bulk density data, 10 (1985) 305

Variation in evapotranspiration and capillary rise with changing soil profile characteristics, 13 (1988) 297

Evaluation of various computational schemes in calculating unsaturated hydraulic conductivity., 13 (1988) 317

Soilwater diffusivity

Effect of mixed cation solutions on hydraulic soil properties, 6 (1983) 15

In situ water transmission characteristics of a tropical soil under rice-based cropping systems, 8 (1984) 387

Soilwater content (balance, deficit, distribution, regime, retention, storage)

Soil and plant water status under sprinkling and trickling, 1 (1976) 33

The dependence of irrigation requirements on watertable depth in drained lands, 1 (1977) 191

Remote sensing for agricultural water management and crop yield prediction, 1 (1978) 299

Effect of vertical mulch on moisture conservation and yield of sorghum in vertisols, 1 (1978) 333 Subsurface drainage results for over-wetted soils

of the Latvian S.S.R., 2 (1979) 55

Evapotranspiration relationship with pan evaporation and evapotranspiration ratio of corn under different nitrogen levels and moisture regimes, 3 (1981) 227

Obtaining soil physical field data for simulating soil moisture regimes and associated potato

growth, 5 (1982) 319

with those estimated by the Meteorological Office system, MORECS: a brief report, 6 (1983) 307

Water use by alfalfa, maize, and barley as influenced by available soil water, 6 (1983) 351

Integrating passive microwave measurements with a soil moisture/heat flow model, 7 (1983) 379

Diffusion-based soil water simulation for native grassland, 9 (1984) 47

Closed border irrigation evaluations, 9 (1984) 139
Relations between available and extractable soil
water and evapotranspiration from a bean
crop, 9 (1984) 193

Assessment of the SPAW model for semi-arid growing conditions with minimal local calibration, 10 (1985) 31

Simulation of soil moisture profiles for scheduling of irrigations, 10 (1985) 175

Field validation of an empirical soil water model, 14 (1988) 317

Maize root development under various levels of salinity and water distribution, 15 (1989) 377

Long-term moisture control for soils with shallow groundwater table, 16 (1989) 75

Some empirical relations for the prediction of soil evaporation, transpiration and root water uptake under field conditions, 16 (1989) 323

Variability of soil water tension and soil water content, 18 (1990) 135

Agricultural water balance of Yunnan Province, PR China: agroclimatic zoning with a Geographical Information System, 21 (1992) 249

Seasonal water balance of a sandy soil in Niger cropped with pearl millet, based on profile moisture measurements, 21 (1992) 313

Use of an hydrophilic polymer to improve water storage and availability to crops grown in sand dunes, I. Corn irrigated by trickling, 23 (1993) 303

Use of an hydrophilic polymer to improve water storage and availability to crops grown in sand dunes, II. Cabbage irrigated by sprinkling with different water salinities, 23 (1993) 315

Modelling soil water status for irrigation scheduling in potatoes, I. Description and sensitivity analysis, 23 (1993) 329

Modelling soil water status for irrigation scheduling in potatoes, II. Validation, 23 (1993) 343

Soil water depletion by sunflower and sorghum under rainfed conditions, 24 (1993) 49

Investigations about the optimum depth of drains in loamy soils in Latvia, 24 (1993) 83

Water use, wetted soil volume, root distribution and yield of avocado under drip irrigation, 24 (1993) 119

Soil water and ET estimates for a wide range of rainfed and irrigated conditions, 24 (1993) 147

Dynamics of water use in a dry mediterranean environment, I. Soil Evaporation little affected by presence of plant canopy, 24 (1993) 205

Dynamics of water use in a dry mediterranean environment, II. A test of four evaporation models using microlysimetry under spring wheat, 24 (1993) 225

Water conservation through irrigation scheduling under arid climatic conditions, 24 (1993) 251 Testing and comparison of three unsaturated soil water flow models, 25 (1994) 135

Soilwater flow

Observations of soil water and salt movement under drip and flood irrigation in an apple orchard, 1 (1977) 179

The dependence of irrigation requirements on watertable depth in drained lands, 1 (1977) 191 Water and salt transport, water uptake, and leaf

water potentials during regular and suspended high frequency irrigation of citrus, 2 (1979) 241 Distribution of water and salt in soil under trickle

Distribution of water and salt in soil under trickle and pot irrigation regimes, 3 (1981) 195

Transport of salts in soils and subsoils, 4 (1981) 35 Residence times of water and solutes within and below the root zone, 4 (1981) 63

Implications of some analytical solutions for drainage of soil water, 6 (1983) 161
Field evidence for a bi-porous soil water regime

Field evidence for a bi-porous soil water regime in clay soils, 11 (1986) 117

Stochastic approach of soil water flow through the use of scaling factors: measurement and simulation, 13 (1988) 249

Soilwater matric potential (soilwater matric suction, soilmatric potential, soilwater suction, soilwater tension, soilwater pressure)

Soil and plant water status under sprinkling and trickling, 1 (1976) 33

Leaf osmotic potential as an indicator of crop water deficit and irrigation need in rapeseed (Brassica napus L.), 1 (1978) 351

Evaluation of the parameters involved in Gardner's relation between unsaturated hydraulic conductivity and soil water matric suction, 2 (1979) 25

Effect of soil matric potential and nitrogen on growth, yield, nutrient uptake and water use of banana, 16 (1989) 109

Importance of irrigation regime, dripline placement and row spacing in the drip irrigation of sugar cane, 17 (1990) 75

Soil Water Status: a concept for characterising soil water conditions beneath a drip irrigated row crop, 17 (1990) 171

The control of drip irrigation of sugarcane using 'index' tensiometers: some comparisons with control by the water budget method, 17 (1990) 189

Influence of drip irrigation emission rate on distribution and drainage of water beneath a sugar cane and a fallow plot, 17 (1990) 267 Variability of soil water tension and soil water content, 18 (1990) 135

Contrasting soil moisture environments beneath sugar cane drip irrigated during the day, and at night, 22 (1992) 271

Soilwater stress

stress, 18 (1990) 63

Response of sorghum to moisture stress using line source sprinkler irrigation, 3 (1981) 279

Photosynthetic activity during stress, 7 (1983) 249 Dynamics of root and shoot growth of barley under various levels of salinity and water

Soilwater uptake (soilwater extraction pattern, water uptake pattern, root water uptake)

Water and salt transport, water uptake, and leaf water potentials during regular and suspended high frequency irrigation of citrus, 2 (1979) 241

Wheat root distribution, water extraction pattern and grain yield as influenced by time and rate of irrigation, 3 (1980) 115

Simulation of water flow in the soil under subsurface trickle irrigation with water uptake by roots, 3 (1981) 179

Transport of salts in soils and subsoils, 4 (1981) 35 Residence times of water and solutes within and below the root zone, 4 (1981) 63

Analyses of solute distributions in deeply weathered soils, 4 (1981) 83

Water balance and pattern of soil water uptake in a peach orchard, 11 (1986) 145

Estimation of soil-water extraction patterns by roots, 12 (1987) 271

Soybean root water uptake in two soils, 15 (1989) 387

Estimation of water uptake pattern of groundnut (Arachis hypogaea L.), 21 (1992) 137

Rootzone processes and the efficient use of irrigation water (Review), 25 (1994) 1

Water logging

The role of adapted farming in the solution of drainage problems on basin clay soils, 2 (1980) 257

Probability of waterlogging estimated from historical rainfall records, 6 (1983) 397

Cotton response to short-term waterlogging imposed with a watertable gradient facility, 10 (1985) 127

Effect of watertable depth and waterlogging on crop yield, 14 (1988) 29

3.3. Groundwater

Biochemical oxygen demand (BOD)

Determination of the permissible amount of liquid animal waste applied to soil filters, 10 (1985) 313

Dissolved oxygen

Dissolved oxygen, total organic carbon and temperature relationships in southeastern U.S. coastal plain watersheds, 9 (1985) 313

Groundwater pollution (contamination, aquifer pollution)

Reducing water quality degradation through minimized leaching management, 1 (1977) 127

Saline seep development and control in the North American Great Plains — hydrogeological aspects, 4 (1981) 115

Determination of the permissible amount of liquid animal waste applied to soil filters, 10 (1985) 313

Change of characteristics of a granular aquifer in agricultural areas, 14 (1988) 329

Estimation of the groundwater pollution potential on an agricultural watershed, 18 (1990) 209

Simulated effects of irrigation management in groundwater contamination, 20 (1992) 281

Groundwater pumping (irrigation water pumping)

Proposals for agricultural development of Wadi Dhuleil catchment, Jordan, 11 (1986) 207

Irrigation, groundwater abstraction and stream flow depletion, 14 (1988) 345

The Tongola groundwater pumping/re-use project: a pilot study for groundwater table control in the Shepparton region in northern Victoria, 14 (1988) 513

Forecasting the suitability of pumped groundwater for irrigation in the Nile Valley, 14 (1988)

Watertable control, reuse and disposal of drainage water in Haryana, 14 (1988) 537

Groundwater quality

Role of solute-transport models in the analysis of groundwater salinity problems in agricultural areas, 4 (1981) 187

Dissolved inorganic nitrogen and phosphate concentration in discharge from two agricultural catchments in eastern Ontario, 5 (1982) 29

Systems approach to an unsaturated-saturated groundwater quality model, including adsorption, decomposition and bypass, 10 (1985) 193

Calculating the quality of drainage water from non-homogeneous soil profiles with an extension to an unsaturated-saturated groundwater quality model including bypass flow, 10 (1985) 293

The influence of water level management and groundwater quality on vegetation development in a small nature reserve in the southern Gelderse Vallei (the Netherlands), 14 (1988) 423

Forecasting the suitability of pumped groundwater for irrigation in the Nile Valley, 14 (1988) 525

Watertable control, reuse and disposal of drainage water in Haryana, 14 (1988) 537

Solute input into groundwater from sandy soils under arable land and coniferous forest: determination of area-representative mean values of concentration, 15 (1989) 265

Nitrogen (nitrate) concentration

Dissolved inorganic nitrogen and phosphate concentration in discharge from two agricultural catchments in eastern Ontario, 5 (1982) 29

Removal of nitrogen and phosphorus from untreated milking-shed wastes after application to permanent pasture, 5 (1981) 181

Description of nitrogen movement in the presence of spatially variable soil hydraulic properties, 6 (1983) 227

Seasonal variations in nitrate leaching in structured clay soils under mixed land use, 7 (1983) 301

Nitrogen leaching during sprinkler irrigation of a Dutch clay soil, 9 (1984) 37

Nutrient inputs and outputs in a forested and grassland catchment at Plynlimon, mid Wales, 9 (1984) 177

Effect of upland pasture improvement on nutrient release in flows from a 'natural' lysimeter and a field drain, 11 (1986) 231

Land use changes and inputs of nitrogen to Loch Leven, Scotland: a desk study, 16 (1989) 119

Organic carbon

Dissolved oxygen, total organic carbon and temperature relationships in southeastern U.S. coastal plain watersheds, 9 (1985) 313

Phosphate concentration

Dissolved inorganic nitrogen and phosphate concentration in discharge from two agricultural catchments in eastern Ontario, 5 (1982) 29 Removal of nitrogen and phosphorus from untreated milking-shed wastes after application to permanent pasture, 5 (1981) 181

Potassium concentration

Soluble potassium transport in agricultural runoff water, 15 (1988) 37

Partially penetrating well

Partially penetrating wells in unconfined aquifers, 20 (1991) 185

Saline intrusion

Coastal salinization: a case history from Oman, 9 (1985) 269

Saline upconing

Coastal salinization: a case history from Oman, 9 (1985) 269

Proposals for agricultural development of Wadi Dhuleil catchment, Jordan, 11 (1986) 207

Seepage

Seepage from Lake Burullus into the reclaimed Mansour and Zawia polder area, 7 (1983) 411

Significance of soil survey for agrohydrological studies, 14 (1988) 195

Restoration of the Vecht lakes ecosystems surrounding the Horstermeer Polder: a feasibility study, 14 (1988) 471

Watertable (watertable depth, watertable fluctuation, watertable height, groundwater level, phreatic level)

The dependence of irrigation requirements on watertable depth in drained lands, 1 (1977) 191

Seasonal water use by winter wheat grown under shallow watertable conditions, 1 (1978) 263

Evaluation of the parameters involved in Gardner's relation between unsaturated hydraulic conductivity and soil water matric suction, 2 (1979) 25

Watertable classes: a method to describe seasonal fluctuation and duration of watertables on Dutch soil maps, 10 (1985) 109

Cotton response to short-term waterlogging imposed with a watertable gradient facility, 10 (1985) 127

Watertable heights in drained anisotropic homogeneous soils, 11 (1986) 1

Estimating watertable contribution to the water supply of maize, 11 (1986) 221

Improving irrigation management by modelling the irrigation schedule, 13 (1988) 113

Effect of watertable depth and waterlogging on crop yield, 14 (1988) 29

Effect of watertable on yield and root depth of winter wheat in the French West Central Atlantic Marshlands, 14 (1988) 35

Drainage benefits: watertable control, workability and crop yields, 14 (1988) 43

Watertable control indices for drainage of agricultural land in humid climates, 14 (1988) 69

Agricultural criteria for subsurface drainage: a systems analysis, 14 (1988) 79

Methods to determine the need for drainage in flat areas, 14 (1988) 97

The influence of water level management and groundwater quality on vegetation development in a small nature reserve in the southern Gelderse Vallei (the Netherlands), 14 (1988) 423

Treatment of spatially variable groundwater levels in one-dimensional stochastic unsaturated water-flow modelling, 15 (1988) 19

Soil porosity in a peach orchard as influenced by watertable depth, 16 (1989) 63

Long-term moisture control for soils with shallow groundwater table, 16 (1989) 75

Effects on irrigation frequency and watertable depths on root growth and yield of tomato in a tropical soil, 16 (1989) 241

A statistical analysis of the effect of drainage conditions and nitrogen fertilizer on apple production, 16 (1989) 251

Effect of intermittent irrigation on groundwater table contribution, irrigation requirement and yield of rice in Mollisols of the Tarai Region, 18 (1990) 231

Watertable behaviour in drained lands: effect of evapotranspiration from the water table, 20 (1992) 313

Evapotranspiration from wheat under a semi-arid climate and a shallow watertable, 23 (1993) 91

Investigations about the optimum depth of drains in loamy soils in Latvia, 24 (1993) 83

The influence of groundwater levels and salinity of a multi-specied tree plantation in the 500 mm rainfall region of south-western Australia, 25 (1994) 185

Wastewater treatment

Removal of nitrogen and phosphorus from untreated milking-shed wastes after application to permanent pasture, 5 (1981) 181

Determination of the permissible amount of liquid animal waste applied to soil filters, 10 (1985)313

The reticulation of ethanol stillage through irrigation systems and its use for fertilisation of sugarcane in Zimbabwe, 17 (1990) 49

Ion exchange treatment of subsurface drainage water, 18 (1990) 121

Trickle irrigation of sunflower with municipal wastewater, 19 (1991) 67

Irrigation and global water outlook, 25 (1994) 221

4. Salt

Calcium

Importance of calcium in irrigation with salinesodic water — a viewpoint, 12 (1987) 207

Carbonates

A kinetic study of the CaCO₃ precipitation reaction, 1 (1978) 253

Modelling transport of reactive solutes during leaching saline-sodic soils rich in soluble carbonates, 3 (1980) 3

Convective transport (flow, flux)

Convective transport of solutes by steady flows, I. General theory, 1 (1978) 201

Convective transport of solutes by steady flows, II. Specific flow problems, 1 (1978) 219

Transport of salts in catchments and soils, 4 (1981) 103

Diffusive transport (flow, flux)

Transport of salts in catchments and soils, 4 (1981) 103

Diffusion-convection transport

Transport of salts in soils and subsoils, 4 (1981) 35 Analyses of solute distributions in deeply weathered soils, 4 (1981) 83

Dryland salinity (saline seep)

Land and stream salinity in Western Australia, 4 (1981) 11

Analyses of solute distributions in deeply weathered soils, 4 (1981) 83

Transport of salts in catchments and soils, 4 (1981) 103

Saline seep development and control in the North American Great Plains — hydrogeological aspects, 4 (1981) 115

Terrain, groundwater and secondary salinity in Victoria, Australia, 4 (1981) 143 Groundwater systems associated with secondary salinity in Western Australia, 4 (1981) 173

Predicting stream salinity changes in southwestern Australia, 4 (1981) 227

Dryland cropping strategies for efficient water-use to control saline seeps in the Northern Great Plains, U.S.A., 4 (1981) 295

Management of soil water budgets of recharge areas for control of salinity in south-western Australia, 4 (1981) 313

South Australia's approach to salinity management in the River Murray, 4 (1981) 335

Dryland management for salinity control, 4 (1981)

Readjusting the water balance to combat dryland salting in southern Australia: changing the hydrology of a texture contrast soil by deep ripping, 14 (1988) 287

Management of sandplain seeps in the wheatbelt of Western Australia, 19 (1991) 85

Simulation of evapotranspiration by trees, 19 (1991) 205

Hydrologic and salinity changes associated with tree plantations in a saline agricultural catchment in southwestern Australia, 22 (1992) 307

The influence of groundwater levels and salinity of a multi-specied tree plantation in the 500 mm rainfall region of south-western Australia, 25 (1994) 185

Gypsum

Deep percolation during prolonged ponding of a swelling soil, and the effect of gypsum treatment, 2 (1979) 131

Salt leaching and the effect of gypsum application in a saline-sodic soil, 2 (1979) 193

Effect of gypsum fineness on the reclamation of sodic soils, 5 (1982) 41

Improvement of irrigation water by gypsum beds, 11 (1986) 293

Enhancement of crop yields from subsurface drains with various envelopes, 15 (1988) 131

Effect of gypsum and sodic irrigation water on soil and crop yields in a rice-wheat rotation, 16 (1989) 53

A laboratory reclamation study for sodic soils used for rice production, 18 (1990) 243

Effect of sodic irrigation and gypsum on the reclamation of sodic soil and growth of rice and wheat plants, 20 (1991) 163

Effect of organic matter and gypsum in controlling soil sodicity in rice-wheat-maize system irrigated with sodic waters, 24 (1993) 15

Leaching

Reducing water quality degradation through minimized leaching management, 1 (1977) 127

Convective transport of solutes by steady flows, II. Specific flow problems, 1 (1978) 219

Minimizing salt in drain water by irrigation management. Design and initial results of Arizona field studies, 1 (1978) 233

Salt leaching and the effect of gypsum application in a saline-sodic soil, 2 (1979) 193

Modelling transport of reactive solutes during leaching saline-sodic soils rich in soluble carbonates, 3 (1980) 3

Seasonal variations in nitrate leaching in structured clay soils under mixed land use, 7 (1983) 391

Nitrogen leaching during sprinkler irrigation of a Dutch clay soil, 9 (1984) 37

Minimizing salt in drain water by irrigation management — Arizona field studies with citrus, 9 (1984) 61

Minimizing salt in drain water by irrigation management — leaching studies with alfalfa, 9 (1984) 89

Solute displacement in a silt loam soil as affected by the method of water application under different evaporation rates, 12 (1986) 63

Desalinisation of recently accreted coastal land in the eastern part of the Bay of Bengal, Bangladesh, 13 (1988) 1

Field evaluation of desalinization models, 24 (1993) 1

A screening method to identify the probabilities of pesticide leaching, 25 (1994) 23

An expert system to determine the probability of pesticide leaching, 25 (1994) 57

Application of the model MACRO to water movement and salt leaching in drained and irrigated marsh soils, Marismas, Spain, 25 (1994) 71

Leaching efficiency

Salt movement, leaching efficiency, and leaching requirement, 4 (1981) 409

Effect of low salinity water on salt displacement in two soils, 19 (1991) 43

Desalinization with subsurface drainage, 19 (1991) 303

Leaching fraction

Determining leaching fraction from field measurements of soil electrical conductivity, 3 (1981) 205 Response of tall fescue to irrigation water salinity, leaching fraction, and irrigation frequency, 7 (1983) 439

Trickle irrigation rates and soil salinity distribution in an almond (*Prunus amygdalus*) orchard, 19 (1991) 271

Leaching requirement

Leaching requirement for salinity control, I. Wheat, sorghum, and lettuce, 2 (1979) 177

Leaching requirement for salinity control, II. Oat, tomato, and cauliflower, 4 (1981) 393

Salt movement, leaching efficiency, and leaching requirement, 4 (1981) 409

Leaching requirement for salinity control, III. Barley, cowpea, and celery, 6 (1983) 1

Leaching requirement of irrigated soils, 11 (1986) 13

A systems approach to drainage reduction in the San Joaquin Valley, 16 (1989) 97

Effect of saline water on establishment of windbreak trees, 25 (1994) 35

Organic manure

The effect of organic manuring and water quality on water transmission parameters and sodication of a sandy loam soil, 2 (1979) 163

Effect of organic matter and gypsum in controlling soil sodicity in rice-wheat-maize system irrigated with sodic waters, 24 (1993) 15

Pesticide

A screening method to identify the probabilities of pesticide leaching, 25 (1994) 23

An expert system to determine the probability of pesticide leaching, 25 (1994) 57

Reclamation

Effect of gypsum fineness on the reclamation of sodic soils, 5 (1982) 41

Groundwater recharge under alkali soils during reclamation, 5 (1982) 51

Reclaiming a saline-sodic, sandy loam soil under rice production, 5 (1982) 61

Drainage and desalinization of heavy clay soil in Portugal, 5 (1982) 227

Seepage from Lake Burullus into the reclaimed Mansour and Zawia polder area, 7 (1983) 411

Twenty years of research on reclamation of saltaffected soils in Romanian rice fields, 9 (1984)

Water harvesting for reclaiming alkali soils, 11 (1986) 127

Desalinisation of recently accreted coastal land in the eastern part of the Bay of Bengal, Bangladesh, 13 (1988) 1

A laboratory reclamation study for sodic soils used for rice production, 18 (1990) 243

Desalinization with subsurface drainage, 19 (1991) 303

Effect of sodic irrigation and gypsum on the reclamation of sodic soil and growth of rice and wheat plants, 20 (1991) 163

Hydrologic and salinity changes associated with tree plantations in a saline agricultural catchment in southwestern Australia, 22 (1992) 307

Salt precipitation

A kinetic study of the CaCO₃ precipitation reaction, 1 (1978) 253

Modelling transport of reactive solutes during leaching saline-sodic soils rich in soluble carbonates, 3 (1980) 3

Effect of organic matter and gypsum in controlling soil sodicity in rice-wheat-maize system irrigated with sodic waters, 24 (1993) 15

Saline-sodic soil

Salt leaching and the effect of gypsum application in a saline-sodic soil, 2 (1979) 193

Modelling transport of reactive solutes during leaching saline-sodic soils rich in soluble carbonates, 3 (1980) 3

Reclaiming a saline-sodic, sandy loam soil under rice production, 5 (1982) 61

Drainage and desalinization of heavy clay soil in Portugal, 5 (1982) 227

Twenty years of research on reclamation of saltaffected soils in Romanian rice fields, 9 (1984) 245

Desalinisation of recently accreted coastal land in the eastern part of the Bay of Bengal, Bangladesh, 13 (1988) 1

An assessment of drip irrigation of sugar cane on poorly structured soils in Swaziland, 17 (1990) 325

Saline-sodic water

Effect of mixed cation solutions on hydraulic soil properties, 6 (1983) 15

Importance of calcium in irrigation with salinesodic water — a viewpoint, 12 (1987) 207

Effect of high salinity and SAR waters on salinization, sodication and yields of pearl-millet and wheat, 21 (1992) 93

Effect of continuous irrigation with sodic and saline-sodic waters on soil properties and

crop yields under cotton-wheat rotation in northwestern India, 22 (1992) 345

Saline water management for optimum crop production, 24 (1993) 189

Using water of marginal quality for crop production: major issues, 25 (1994) 233

Irrigation with poor quality water (Review), 25 (1994) 271

Sodic soil (sodic clay, alkali soil)

Deep percolation during prolonged ponding of a swelling soil, and the effect of gypsum treatment, 2 (1979) 131

Effect of gypsum fineness on the reclamation of sodic soils, 5 (1982) 41

Groundwater recharge under alkali soils during reclamation, 5 (1982) 51

Water harvesting for reclaiming alkali soils, 11 (1986) 127

A laboratory reclamation study for sodic soils used for rice production, 18 (1990) 243

Effect of irrigation scheduling on growth, yield and evapotranspiration of wheat in sodic soils, 18 (1990) 267

Effect of sodic irrigation and gypsum on the reclamation of sodic soil and growth of rice and wheat plants, 20 (1991) 163

Effect of irrigation on growth, yield and evapotranspiration of mustard (*Brassica juncea*) in partially reclaimed sodic soils, 23 (1993) 225

Sodic water

Effect of gypsum and sodic irrigation water on soil and crop yields in a rice-wheat rotation, 16 (1989) 53

Prediction of sustained sodic irrigation effects on soil sodium saturation and crop yields, 16 (1989) 217

Effect of sodic irrigation and gypsum on the reclamation of sodic soil and growth of rice and wheat plants, 20 (1991) 163

Effect of continuous irrigation with sodic and saline-sodic waters on soil properties and crop yields under cotton-wheat rotation in northwestern India, 22 (1992) 345

Effect of organic matter and gypsum in controlling soil sodicity in rice-wheat-maize system irrigated with sodic waters, 24 (1993) 15

Soil electrical conductivity

Determining leaching fraction from field measurements of soil electrical conductivity, 3 (1981) 205 A simple model for extrapolating the electrical conductivity data of gypsum containing soils from reference soil extract data, 21 (1992) 235

Soil salinity

Osmotoc potentials of roots of onions and their rhizospheric soil solutions when irrigated with saline drainage waters (Short Communications), 3 (1981) 317

Problems of irrigated agriculture in Al-Hassa, Saudi Arabia, 5 (1982) 359

Economic evaluation of salinity, drainage and non-uniformity of infiltrated irrigation water, 10 (1985) 221

Irrigation with brackish water under desert conditions, III. Methods for achieving good germination under sprinkler irrigation with brackish water, 10 (1985) 335

Trickle irrigation of cotton: effect on soil chemical properties, 11 (1986) 159

Irrigation with brackish water under desert conditions, IV. Salt tolerance studies with lettuce (Lactuca sativa L.), 11 (1986) 303

Irrigation with brackish water under desert conditions, VII. Effect of time of application of brackish water on production of processing tomatoes (*Lycopersicon esculentum Mill.*), 12 (1986) 149

Reuse and disposal of higher salinity subsurface drainage water — a review, 14 (1988) 483

The Tongola groundwater pumping/re-use project: a pilot study for groundwater table control in the Shepparton region in northern Victoria, 14 (1988) 513

Watertable control, reuse and disposal of drainage water in Haryana, 14 (1988) 537

Enhancement of crop yields from subsurface drains with various envelopes, 15 (1988) 131

Effect of spatial variability on the estimation of the soluble salt content in a drip-irrigated saline loam soil, 15 (1989) 361

Maize root development under various levels of salinity and water distribution, 15 (1989) 377

Irrigation with brackish water under desert conditions, VIII. further studies on Onion (Allium cepa L.) production with brackish water, 16 (1989) 201

Dynamics of root and shoot growth of barley under various levels of salinity and water stress, 18 (1990) 63

Production functions relating crop yield, water quality and quantity, soil salinity and drainage volume, 19 (1991) 51 Trickle irrigation rates and soil salinity distribution in an almond (*Prunus amygdalus*) orchard, 19 (1991) 271

Development of soil salinity during germination and early seedling growth and its effect on several crops, 20 (1991) 17

Effect of high salinity and SAR waters on salinization, sodication and yields of pearl-millet and wheat, 21 (1992) 93

Effect of salinity on water stress, growth and yield of broadbeans, 21 (1992) 107

Effect of continuous irrigation with sodic and saline-sodic waters on soil properties and crop yields under cotton-wheat rotation in northwestern India, 22 (1992) 345

The water-use efficiency of winter wheat and maize on a salt-affected soil in the Huang Huai Hai river plain of China, 23 (1993) 67

Conjunctive use of saline and non-saline waters, I. Response of wheat to initial salinity profiles and salinisation patterns, 23 (1993) 125

Conjunctive use of saline and non-saline waters, II. Field comparisons of cyclic uses and mixing for wheat, 23 (1993) 139

Effect of retention of run-off water and grazing on soil and on vegetation of a temperature humid grassland, 23 (1993) 233

Effect of saline water on soil salinity and on water stress, growth, and yield of wheat and potatoes, 23 (1993) 247

Using water of marginal quality for crop production: major issues, 25 (1994) 233

Irrigation with poor quality water (Review), 25 (1994) 271

Soil sodicity

The effect of organic manuring and water quality on water transmission parameters and sodication of a sandy loam soil, 2 (1979) 163

Trickle irrigation of cotton: effect on soil chemical properties, 11 (1986) 159

Effect of exchangeable sodium percent on surface sealing, 11 (1986) 247

Effect of gypsum and sodic irrigation water on soil and crop yields in a rice-wheat rotation, 16 (1989) 53

Prediction of sustained sodic irrigation effects on soil sodium saturation and crop yields, 16 (1989) 217

Effect of high salinity and SAR waters on salinization, sodication and yields of pearl-millet and wheat, 21 (1992) 93

Effect of continuous irrigation with sodic and saline-sodic waters on soil properties and

crop yields under cotton-wheat rotation in northwestern India, 22 (1992) 345

Effect of retention of run-off water and grazing on soil and on vegetation of a temperature humid grassland, 23 (1993) 233

Effect of organic matter and gypsum in controlling soil sodicity in rice-wheat-maize system irrigated with sodic waters, 24 (1993) 15

Solute transport

Observations of soil water and salt movement under drip and flood irrigation in an apple orchard, 1 (1977) 179

Water and salt transport, water uptake, and leaf water potentials during regular and suspended high frequency irrigation of citrus, 2 (1979) 241

Modelling transport of reactive solutes during leaching saline-sodic soils rich in soluble carbonates, 3 (1980) 3

Distribution of water and salt in soil under trickle and pot irrigation regimes, 3 (1981) 195

Transport of salts in catchments and soils, 4 (1981) 103

Salt movement, leaching efficiency, and leaching requirement, 4 (1981) 409

Description of nitrogen movement in the presence of spatially variable soil hydraulic properties, 6 (1983) 227

Solute displacement in a silt loam soil as affected by the method of water application under different evaporation rates, 12 (1986) 63

Effect of low salinity water on salt displacement in two soils, 19 (1991) 43

Desalinization with subsurface drainage, 19 (1991) 303

The effect of timing on the redistribution of water-applied nitrogen in a sandy soil, 20 (1992) 255

Rootzone processes and the efficient use of irrigation water (Review), 25 (1994) 1

5. Water conservation

Clay lining

Clay lining of leaking earth dams, 17 (1990) 379

Contour bunding (contour banks)

Effects of catchment management on runoff, water quality and yield potential from vertisols, 12 (1986) 1

A modified contour bunding system for alfisols of the semi-arid tropics, 16 (1989) 187 Effect of retention of run-off water and grazing on soil and on vegetation of a temperature humid grassland, 23 (1993) 233

Erosion

Runoff and soil loss from an oxisol in southeastern Nigeria under various management practices, 5 (1982) 193

Effects of catchment management on runoff, water quality and yield potential from vertisols, 12 (1986) 1

Development of a portable rainfall simulator infiltrometer for infiltration, runoff and erosion studies, 22 (1992) 235

Farmwater reservoir (farm dam, storage tank)

Effects of catchment management on runoff, water quality and yield potential from vertisols, 12 (1986) 1

Some low-cost methods for seepage control in storage tanks in alfisols and vertisols, 12 (1986)

Hydrological analysis of farm reservoirs in rainfed rice areas, 17 (1990) 351

Clay lining of leaking earth dams, 17 (1990) 379

Nutrient trapping efficiency of a small sediment detention reservoir, 18 (1990) 149

Design of storage tanks for water harvesting in rainfed areas, 18 (1990) 195

Ranking irrigation tanks for modernization, 20 (1991) 155

Water management strategy for increasing monsoon rice production in Bangladesh, 22 (1992) 335

Irrigation requirement of transplanted monsoon rice in Bangladesh, 23 (1993) 199

Micro catchment

A linear regression model combined with a soil water balance model to design microcatchments for water harvesting in arid zones, 11 (1986) 187

Micro-Catchment-Water-Harvesting (MCWH) for arid zone development, 12 (1986) 21

Effect of variations in soil properties and precipitation on micro-catchment water balance, 12 (1987) 177

Reservoir sedimentation

Economic feasibility of agricultural management practices for reducing sedimentation in a water supply lake, 19 (1991) 361

Reservoir water quality

The effect of filter feeding fish on water quality in irrigation reservoirs, 22 (1992) 369

Runoff (surface flow, flood flow)

Water harvesting by wax-treated soil surfaces: progress, problems, and potential, 3 (1980) 125 Effect of runoff concentration on growth and

yield of jujube, 5 (1982) 73

A review of rainwater harvesting, 5 (1982) 145

Runoff and soil loss from an oxisol in southeastern Nigeria under various management practices, 5 (1982) 193

Runoff behaviour of water harvesting microcatchments, 11 (1986) 137

Effects of catchment management on runoff, water quality and yield potential from vertisols, 12 (1986) 1

Micro-Catchment-Water-Harvesting (MCWH) for arid zone development, 12 (1986) 21

Effect of variations in soil properties and precipitation on micro-catchment water balance, 12 (1987) 177

Soluble potassium transport in agricultural runoff water, 15 (1988) 37

Rainfall retention probabilities computed for different cropping-tillage systems, 15 (1988) 61

Flood flow through tall vegetation, 18 (1990) 317 Strip cropping — development of guidelines for the selection of strip spacing, 20 (1991) 1

A rainfall simulator study of infiltration into arable soils, 21 (1992) 119

Development of a portable rainfall simulator infiltrometer for infiltration, runoff and erosion studies, 22 (1992) 235

Effects of moling and cultivation on soil-water and runoff from a drained clay soil, 23 (1993) 161

Mathematic-statistical simulation of topsoil particle losses during heavy rainfall, 25 (1994) 121

Runoff sampler

Runoff sampler for small agricultural watersheds, 19 (1991) 105

Stream (river) flow

Regional variability of soil characteristics for flood and low flow estimation, 6 (1983) 255

Influence on streamflow of field drainage in a small agricultural catchment, 10 (1985) 145

Irrigation, groundwater abstraction and stream flow depletion, 14 (1988) 345

Streamwater quality (salinity)

Groundwater systems associated with secondary salinity in Western Australia, 4 (1981) 173

Role of solute-transport models in the analysis of groundwater salinity problems in agricultural areas, 4 (1981) 187

Predicting stream salinity changes in southwestern Australia, 4 (1981) 227

The influence of stream salinity on reservoir water quality, 4 (1981) 255

Impact of water resource development on salinization of semi-arid lands, 4 (1981) 275

South Australia's approach to salinity management in the River Murray, 4 (1981) 335

Nutrient inputs and outputs in a forested and grassland catchment at Plynlimon, mid Wales, 9 (1984) 177

Dissolved oxygen, total organic carbon and temperature relationships in southeastern U.S. coastal plain watersheds, 9 (1985) 313

Effects of catchment management on runoff, water quality and yield potential from vertisols, 12 (1986) 1

Nutrient trapping efficiency of a small sediment detention reservoir, 18 (1990) 149

Water conservation

Effects of catchment management on runoff, water quality and yield potential from vertisols, 12 (1986) 1

Water conservation, 14 (1988) 233

Prospects of soil moisture conservation by fallowing in areas of medium agricultural potential in smallholder farming, 14 (1988) 265

Effect of water conservation on the yield of upland crops in the humid tropics, 14 (1988) 277

Modelling the effects of tied-ridging on water conservation and crop yields, 16 (1989) 87

Irrigation and global water outlook, 25 (1994) 221

Water harvesting

Water harvesting by wax-treated soil surfaces: progress, problems, and potential, 3 (1980) 125 Effect of runoff concentration on growth and yield of jujube, 5 (1982) 73

A review of rainwater harvesting, 5 (1982) 145 Water harvesting for reclaiming alkali soils, 11 (1986) 127

Runoff behaviour of water harvesting microcatchments, 11 (1986) 137

Micro-Catchment-Water-Harvesting (MCWH) for arid zone development, 12 (1986) 21

An empirical approach for predicting runoff yield under desert conditions,

Water harvesting strategies in the semi-arid climate of southeastern Spain, 14 (1988) 253

Minimal irrigation on small agricultural watersheds with red soils in the semi-arid tropics of Andhra Pradesh, India, 16 (1989) 279

Rainwater harvesting for the management of agricultural droughts in the foothills of northern India, 16 (1989) 309

Design of storage tanks for water harvesting in rainfed areas, 18 (1990) 195

Three years experience with an on-farm macro-catchment water harvesting system in Botswana, 19 (1991) 191

Effect of retention of run-off water and grazing on soil and on vegetation of a temperature humid grassland, 23 (1993) 233

6. Climate and hydrology

6.1. Climate

Aridity index

Variability of soil water deficiencies for perennial forages in the Canadian prairie region, 20 (1991) 87

Atmospheric carbon dioxyde

Increasing atmospheric CO₂: effects on crop yield, water use and climate, 7 (1983) 55

Potential for plant environment modification, 7 (1983) 73

Role of hydrological forecasts and river flow modelling in rational agricultural water management in the perspective of a climate change — a case study of the Rivers Upper Nile and Niger, 13 (1988) 383

Climate change

Increasing atmospheric CO₂: effects on crop yield, water use and climate, 7 (1983) 55

Soil management for semi-arid regions, 7 (1983)

Role of hydrological forecasts and river flow modelling in rational agricultural water management in the perspective of a climate change — a case study of the Rivers Upper Nile and Niger, 13 (1988) 383

Sensitivity of agricultural drainage systems to changes in climatic inputs, 21 (1992) 57

Cloud seedling

Augmentation of rainfall from summer cumulus clouds, 7 (1983) 3

Considerations in the development of a state operational weather modification plan, 7 (1983) 37

Evaporation

Terminology and concepts in natural evaporation, 8 (1984) 77

Evaporation and drift losses from sprinkler irrigation systems under various operating conditions, 8 (1984) 439

Bare soil evaporation near a surface point-source emitter, 11 (1986) 257

Micro and large-scale parameters evaluation of evaporation from a lake, 13 (1988) 263

Sensitivity of Penman estimates of evaporation to errors in input data, 15 (1989) 279

Dynamics of Water Use in a dry mediterranean environment, I. Soil Evaporation little affected by presence of plant canopy, 24 (1993) 205

Evapotranspiration

Water balance estimates of evaporation from ponded rice fields in a semi-arid region, 1 (1976) 89

Seasonal water use by winter wheat grown under shallow watertable conditions, 1 (1978) 263

Remote sensing for agricultural water management and crop yield prediction, 1 (1978) 299

Evapotranspiration relationship with pan evaporation and evapotranspiration ratio of corn under different nitrogen levels and moisture regimes, 3 (1981) 227

Water use by alfalfa, maize, and barley as influenced by available soil water, 6 (1983) 351

Estimation of evapotranspiration at one time-ofday using remotely sensed surface temperatures, 7 (1983) 341

Estimation of daily evapotranspiration from one time-of-day measurements, 7 (1983) 351

Measurement and prediction of evaporation from forested and agricultural catchments, 8 (1984) 1

Evapotranspiration from a eucalyptus community, 8 (1984) 41

Determination of the evapotranspiration of E. Regnans forested catchments using hydrological measurements, 8 (1984) 57

Terminology and concepts in natural evaporation, 8 (1984) 77

Evapotranspiration and soil heterogeneity, 8 (1984) 279

Relations between available and extractable soil water and evapotranspiration from a bean crop, 9 (1984) 193

Evapotranspiration and grassland yield, 10 (1985)

Irrigated guayule — evapotranspiration and plant water stress, 10 (1985) 61

Water requirement for irrigated rice in a semiarid region in West Africa, 11 (1986) 75

Water balance and pattern of soil water uptake in a peach orchard, 11 (1986) 145

Water use of eucalypts — a review with special reference to South India, 11 (1986) 333

Irrigation requirements of rice under shallow watertable conditions, 12 (1986) 127

Evapotranspiration, pan evaporation and soil water relationships for wheat (*Triticum aestivum*), 13 (1988) 65

Variation in evapotranspiration and capillary rise with changing soil profile characteristics, 13 (1988) 297

The influence of sub-soil on the moisture regime in irrigated fields, 14 (1988) 307

Modelling forest water consumption in the Netherlands, 14 (1988) 413

Pasture evapotranspiration under varying tree planting density in an agroforestry experiment, 15 (1988) 87

Crop coefficients for peanut evapotranspiration, 15 (1988) 155

Tropicalisation of automatic weather stations and initial results for improved irrigation water management in Reunion Island, 17 (1990) 141

Effect of irrigation scheduling on growth, yield and evapotranspiration of wheat in sodic soils, 18 (1990) 267

Water use of a winter wheat cultivar (Triticum aestivum), 19 (1991) 77

Effect of evapotranspiration underprediction on irrigation scheduling and yield of corn: a simulation study, 19 (1991) 167

Simulation of evapotranspiration by trees, 19 (1991) 205

Variability of soil water deficiencies for perennial forages in the Canadian prairie region, 20 (1991) 87

Watertable behaviour in drained lands: effect of evapotranspiration from the water table, 20 (1992) 313

Computing the water balance of a small agricultural catchment in southern England by consideration of different land-use types, II. Evaporative losses from different vegetation types, 21 (1992) 155 Dynamics of water use under annual legume pastures in a semi-arid mediterranean environment, 22 (1992) 291

Water use of agricultural and native plants in a Western Australian wheatbelt catchment, 22 (1992) 357

Evapotranspiration from wheat under a semi-arid climate and a shallow watertable, 23 (1993) 91

Water use of Vitis vinifera grapes in Washington, 23 (1993) 109

Effect of irrigation on growth, yield and evapotranspiration of mustard (*Brassica juncea*) in partially reclaimed sodic soils, 23 (1993) 225

Soil water and ET estimates for a wide range of rainfed and irrigated conditions, 24 (1993) 147

Dynamics of water use in a dry mediterranean environment, I. Soil Evaporation little affected by presence of plant canopy, 24 (1993) 205

Observations and modeling of interactions between barley yield and evapotranspiration in the subarctic, 25 (1994) 109

Evapotranspiration measurement (determination, equation)

A comparison of the Priestley-Taylor and Penman methods for estimating reference crop evapotranspiration in tropical countries, 6 (1983) 65

The Meteorological Office Rainfall and Evaporation Calculation System — MORECS, 6 (1983) 297

Measuring evapotranspiration by hydrological methods, 8 (1984) 29

The measurement of evaporation by meteorological methods, 8 (1984) 99

The uses and limitations of flux-gradient relationships in micrometeorology, 8 (1984) 119

Evapotranspiration — how good is the Bowen ratio method?, 8 (1984) 133

Evaluation of evapotranspiration and canopy resistance: an alternative combination approach, 8 (1984) 151

Plant physiological methods for studying evapotranspiration: problems of telling the forest from the trees, 8 (1984) 167

Evapotranspiration of four major agricultural plant communities in the south-west of Western Australia measured with large ventilated chambers, 8 (1984) 191

Modelling evapotranspiration: an approach to heterogeneous communities, 8 (1984) 203

Water use by isolated trees, 8 (1984) 223

A model of canopy drying, 8 (1984) 243

Using the Penman-Monteith equation predictively, 8 (1984) 263

Micro and large-scale parameters evaluation of evaporation from a lake, 13 (1988) 263

Reference crop evapotranspiration over Greece, 20 (1991) 209

Canopy temperature to assess daily evapotranspiration and management of high frequency drip irrigation systems, 22 (1992) 379

Pan evaporation

Water balance estimates of evaporation from ponded rice fields in a semi-arid region, 1 (1976) 89

Water use in lowland rice cultivation in Asia: a review of evapotranspiration, 3 (1980) 83

Evapotranspiration relationship with pan evaporation and evapotranspiration ratio of corn under different nitrogen levels and moisture regimes, 3 (1981) 227

Evapotranspiration, pan evaporation and soil water relationships for wheat (*Triticum aestivum*), 13 (1988) 65

Use of pan evaporation for estimating the total dose and programming the irrigation of sugarcane, 17 (1990) 209

Evapotranspiration from wheat under a semi-arid climate and a shallow watertable, 23 (1993) 91

Rainfall

Probability of waterlogging estimated from historical rainfall records, 6 (1983) 397

Augmentation of rainfall from summer cumulus clouds, 7 (1983) 3

Society's involvement in planned weather modification, 7 (1983) 15

Utilization and assessment of operational weather modification programs for augmenting precipitation, 7 (1983) 23

Considerations in the development of a state operational weather modification plan, 7 (1983) 37

Infrared remote sensing for monitoring rainfall, 7 (1983) 363

Spatial variability of rainfall and yield of maize in a semi-arid region, 10 (1985) 13

Effect of variations in soil properties and precipitation on micro-catchment water balance, 12 (1987) 177

Rainfall irregularity and sowing strategies in Southern Mozambique, 13 (1988) 49

Rainfall probability forecasts used to manage a subdrainage-subirrigation system for watertable control, 15 (1988) 47

Rainfall retention probabilities computed for different cropping-tillage systems, 15 (1988) 61

Furrow irrigators response to in-season precipitation and geographic characteristics, 23 (1993) 41

Mathematic-statistical simulation of topsoil particle losses during heavy rainfall, 25 (1994) 121

Rainfall interception

The influence of plant communities upon the hydrology of catchments, 4 (1981) 19

Water use of eucalypts — a review with special reference to South India, 11 (1986) 333

Modelling forest water consumption in the Netherlands, 14 (1988) 413

Rainfall simulator

A rainfall simulator study of infiltration into arable soils, 21 (1992) 119

Development of a portable rainfall simulator infiltrometer for infiltration, runoff and erosion studies, 22 (1992) 235

Temperature

Dissolved oxygen, total organic carbon and temperature relationships in southeastern U.S. coastal plain watersheds, 9 (1985) 313

Weather modification

Society's involvement in planned weather modification, 7 (1983) 15

Utilization and assessment of operational weather modification programs for augmenting precipitation, 7 (1983) 23

Considerations in the development of a state operational weather modification plan, 7 (1983) 37

6.2. Hydrology

Catchment hydrology

The influence of plant communities upon the hydrology of catchments, 4 (1981) 19

A design-discharge calculation method based on the parallel use of reservoir models, 5 (1982) 205

Computing the water balance of a small agricultural catchment in southern England by consideration of different land-use types, II. Evaporative losses from different vegetation types, 21 (1992) 155

Field water balance

Water balance estimates of evaporation from ponded rice fields in a semi-arid region, 1 (1976) 89

Water balance of flooded rice paddies, 1 (1978) 277

Computing the water balance of a small agricultural catchment in southern England by consideration of different land-use types, II. Evaporative losses from different vegetation types, 21 (1992) 155

Seasonal water balance of a sandy soil in Niger cropped with pearl millet, based on profile moisture measurements, 21 (1992) 313

Regional water balance

Groundwater recharge under alkali soils during reclamation, 5 (1982) 51

Regional water management

Water management plan for the Al-Hassa Irrigation and Drainage Project in Saudi Arabia, 13 (1988) 185

Conjunctive use of water for irrigation, municipal and industrial water supply in Istra, Yugoslavia, 13 (1988) 211

Role of hydrological forecasts and river flow modelling in rational agricultural water management in the perspective of a climate change — a case study of the Rivers Upper Nile and Niger, 13 (1988) 383

Description of a regional groundwater flow model SIMGRO and some applications, 14 (1988) 209

The importance of hydrological research in designing rural water management systems as part of land development projects in the Netherlands, 14 (1988) 365

Operational aspects of surface water management in relation to the hydrology of agricultural areas and nature reserves, 14 (1988) 377

Hydrological research and the design of a water management system for a peatland area with agriculture and nature in the land consolidation project Echtener and Groote Veenpolder, 14 (1988) 389

Hydrochemistry of rich fen and water management, 14 (1988) 399

The impact of water management upon groundwater fluctuations in a disturbed bog relict, 14 (1988) 439

The integration of wetlands into man-made landscapes of N.W. Germany, 14 (1988) 451 Hydrology of the wetland Naarderemeer: influence of the surrounding area and impact on vegetation, 14 (1988) 459

Restoration of the Vecht lakes ecosystems surrounding the Horstermeer Polder: a feasibility study, 14 (1988) 471

Reuse and disposal of higher salinity subsurface drainage water — a review, 14 (1988) 483

The Tongola groundwater pumping/re-use project: a pilot study for groundwater table control in the Shepparton region in northern Victoria, 14 (1988) 513

A systems approach to drainage reduction in the San Joaquin Valley, 16 (1989) 97

Wetland hydrology

Hydrology of natural wetlands and wet nature reserves, 14 (1988) 357

The importance of hydrological research in designing rural water management systems as part of land development projects in the Netherlands, 14 (1988) 365

Operational aspects of surface water management in relation to the hydrology of agricultural areas and nature reserves, 14 (1988) 377

Hydrological research and the design of a water management system for a peatland area with agriculture and nature in the land consolidation project Echtener and Groote Veenpolder, 14 (1988) 389

Hydrochemistry of rich fen and water management, 14 (1988) 399

The influence of water level management and groundwater quality on vegetation development in a small nature reserve in the southern Gelderse Vallei (the Netherlands), 14 (1988) 423

The impact of water management upon groundwater fluctuations in a disturbed bog relict, 14 (1988) 439

The integration of wetlands into man-made landscapes of N.W. Germany, 14 (1988) 451

Hydrology of the wetland Naarderemeer: influence of the surrounding area and impact on vegetation, 14 (1988) 459

Restoration of the Vecht lakes ecosystems surrounding the Horstermeer Polder: a feasibility study, 14 (1988) 471

Quantification of local ecological effect in regional hydrologic modelling of bog reserves and surrounding agricultural lands, 25 (1994) 45

7. Crop growth and crops

7.1. Crop growth

Breeding

Drought resistance and wheat breeding, 7 (1983) 181

Genetic and physiological relationships in plant breeding for drought resistance, 7 (1983) 195

Canopy cover

Dynamics of water use in a dry mediterranean environment, I. Soil Evaporation little affected by presence of plant canopy, 24 (1993) 205

Canopy resistance

Evaluation of evapotranspiration and canopy resistance: an alternative combination approach, 8 (1984) 151

Crop coefficient

Water requirement for irrigated rice in a semiarid region in West Africa, 11 (1986) 75

Water production function of sorghum for northeast Brazil, 11 (1986) 169

Crop coefficients for peanut evapotranspiration, 15 (1988) 155

Crop coefficients of some major crops of the Nigerian semi-arid tropics, 18 (1990) 159

Crop water stress index

Infrared thermometry: a remote sensing technique for predicting yield in water-stressed cotton, 6 (1983) 385

Irrigated guayule — evapotranspiration and plant water stress, 10 (1985) 61

Utilization of thermal infrared thermometry for detection of water stress in spring barley, 12 (1986) 75

Optimum sorghum planting dates in western Sudan by simulated water budgets, 13 (1988)

Crop water stress index for seed alfalfa: influences of within-season changes in plant morphology, 19 (1991) 135

Relationships between normalized leaf water potential and crop water stress index values for acala cotton, 20 (1991) 109

Canopy temperature to assess daily evapotranspiration and management of high frequency drip irrigation systems, 22 (1992) 379

Evaluating three cotton simulation models under different irrigation regimes, 22 (1992) 391 Relationships between leaf water potential, CWSI, yield and fruit quality of sweet lime under drip irrigation, 25 (1994) 13

Crop water use efficiency (water use efficiency)

Irrigation frequency and total water application with trickle and furrow systems, 1 (1976) 21

Seasonal water use by winter wheat grown under shallow watertable conditions, 1 (1978) 263

Evaluation of water management systems in a tubewell irrigated farm, 2 (1979) 67

Trickle irrigation timing and its effect on plant and soil water status, 2 (1979) 225

Frequency and amount of irrigation for maize in western Nigeria, 2 (1979) 233

Yield, water use and root distribution of wheat as affected by pre-sowing and post-sowing irrigation, 2 (1980) 289

Water use, water-use efficiency and yield of dryland chickpea as influenced by P fertilization, stored soil water and crop season rainfall, 2 (1980) 299

Water use and water-use efficiency of wheat and barley in relation to seeding dates, levels of irrigation and nitrogen fertilization, 3 (1981) 305

Increasing atmospheric CO₂: effects on crop yield, water use and climate, 7 (1983) 55

Irrigated guayule — production and water use relationships, 10 (1985) 95

Water use and yield response of wheat to irrigation and nitrogen on an alluvial soil in North India, 12 (1987) 311

Effect of water conservation on the yield of upland crops in the humid tropics, 14 (1988) 277

Water use and yield relationships of irrigated potato, 18 (1990) 173

Effect of intermittent irrigation on groundwater table contribution, irrigation requirement and yield of rice in Mollisols of the Tarai Region, 18 (1990) 231

Effect of irrigation scheduling on growth, yield and evapotranspiration of wheat in sodic soils, 18 (1990) 267

Moisture stress and the water use efficiency of mustard, 20 (1991) 245

Scheduling irrigation for peanuts with variable amounts of available water, 23 (1993) 1

The water-use efficiency of winter wheat and maize on a salt-affected soil in the Huang Huai Hai river plain of China, 23 (1993) 67

Rootzone processes and the efficient use of irrigation water (Review), 25 (1994) 1

Observations and modeling of interactions between barley yield and evapotranspiration in the subarctic, 25 (1994) 109

Effect of drip irrigation and mulching on tomato yield, 25 (1994) 179

Crop yield (production)

Irrigation frequency and total water application with trickle and furrow systems, 1 (1976) 21

Soil and plant water status under sprinkling and trickling, 1 (1976) 33

Observations of soil water and salt movement under drip and flood irrigation in an apple orchard, 1 (1977) 179

The dependence of irrigation requirements on watertable depth in drained lands, 1 (1977) 191

Seasonal water use by winter wheat grown under shallow watertable conditions, 1 (1978) 263

Effect of vertical mulch on moisture conservation and yield of sorghum in vertisols, 1 (1978) 333

Leaf osmotic potential as an indicator of crop water deficit and irrigation need in rapeseed (Brassica napus L.), 1 (1978) 351

Leaching requirement for salinity control, I. Wheat, sorghum, and lettuce, 2 (1979) 177

Frequency and amount of irrigation for maize in western Nigeria, 2 (1979) 233

Yield, water use and root distribution of wheat as affected by pre-sowing and post-sowing irrigation, 2 (1980) 289

Water use, water-use efficiency and yield of dryland chickpea as influenced by P fertilization, stored soil water and crop season rainfall, 2 (1980) 299

Sugarcane response to irrigation and straw mulch in a subtropical region, 3 (1980) 35

Frequency and depth of irrigation for groundnut, 3 (1980) 45

Water use and wheat yields in northern India under different irrigation regimes, 3 (1980) 107

Wheat root distribution, water extraction pattern and grain yield as influenced by time and rate of irrigation, 3 (1980) 115

Yield response of a semi-dwarf wheat variety to irrigation on a calcareous brown flood plain soil of Bangladesh, 3 (1981) 217

Evapotranspiration relationship with pan evaporation and evapotranspiration ratio of corn under different nitrogen levels and moisture regimes, 3 (1981) 227

Water use and water-use efficiency of wheat and barley in relation to seeding dates, levels of irrigation and nitrogen fertilization, 3 (1981) 305

Leaching requirement for salinity control, II. Oat, tomato, and cauliflower, 4 (1981) 393

Effect of field levelling quality on irrigation efficiency and crop yield, 4 (1981) 457

Effect of runoff concentration on growth and yield of jujube, 5 (1982) 73

Influence of irrigation on the development and yield of potatoes, 5 (1982) 171

Effect of irrigation and harvesting dates on the yield of spring-sown sugar-beet, 5 (1982) 345

Effect of small irrigation amounts on the yield of wheat, 6 (1983) 31

Wheat root growth, grain yield and water uptake as influenced by soil water regime and depth of nitrogen placement in a loamy sand soil, 6 (1983) 365

Increasing atmospheric CO₂: effects on crop yield, water use and climate, 7 (1983) 55

Soil management for semi-arid regions, 7 (1983) 89

Remote monitoring of rangeland production, 7 (1983) 323

Effect of drainage conditions on winter wheat production, 7 (1983) 425

Yield and quality of furrow and trickle irrigated hop (Humulus Lupulus L.) in Washington State, 7 (1983) 457

Irrigation with brackish water under desert conditions, I. Problems and solutions in production of onions (Allium Cepa L.), 9 (1984) 225

Yield of single versus twin-row trickle irrigated cotton, 9 (1984) 237

Yield and quality of trickle-irrigated chile peppers, 9 (1985) 339

Evapotranspiration and grassland yield, 10 (1985)

Spatial variability of rainfall and yield of maize in a semi-arid region, 10 (1985) 13

Irrigation with brackish water under desert conditions, II. Physiological and yield response of maize (Zea Mays) to continuous irrigation with brackish water and to alternating brackish-fresh-brackish water irrigation, 10 (1985) 47

Irrigated guayule — plant growth and production, 10 (1985) 81

Cotton response to short-term waterlogging imposed with a watertable gradient facility, 10 (1985) 127

Effects of alternate-furrow irrigation: water conservation on the yields of two soybean cultivars, 10 (1985) 253

Irrigation scheduling effects on yield and phosphorus uptake of cowpea, 10 (1985) 343 Response of wheat to irrigation with small amounts of water applied in various ways, 10 (1985) 357

Within-row irrigation saves water on croplands, 11 (1986) 31

Estimating watertable contribution to the water supply of maize, 11 (1986) 221

Irrigation with brackish water under desert conditions, IV. Salt tolerance studies with lettuce (Lactuca sativa L.), 11 (1986) 303

Fresh market tomato yields as affected by deficit irrigation using a micro-irrigation system, 12 (1986) 117

Irrigation requirements of rice under shallow watertable conditions, 12 (1986) 127

Irrigation with brackish water under desert conditions, VII. Effect of time of application of brackish water on production of processing tomatoes (*Lycopersicon esculentum Mill.*), 12 (1986) 149

Effect of variations in soil properties and precipitation on micro-catchment water balance, 12 (1987) 177

Water use and yield response of wheat to irrigation and nitrogen on an alluvial soil in North India, 12 (1987) 311

An economic evaluation of sugar cane production under different water supply systems in Thailand, 13 (1988) 83

Effect of watertable depth and waterlogging on crop yield, 14 (1988) 29

Effect of watertable on yield and root depth of winter wheat in the French West Central Atlantic Marshlands, 14 (1988) 35

Drainage benefits: watertable control, workability and crop yields, 14 (1988) 43

Effect of water conservation on the yield of upland crops in the humid tropics, 14 (1988) 277

The influence of sub-soil on the moisture regime in irrigated fields, 14 (1988) 307

Enhancement of crop yields from subsurface drains with various envelopes, 15 (1988) 131

Response of groundnut to drought stress in different growth phases, 15 (1989) 301

Vield variability and water use in wide-spaced

Yield variability and water use in wide-spaced furrow irrigation, 16 (1989) 15

Effect of gypsum and sodic irrigation water on soil and crop yields in a rice-wheat rotation, 16 (1989) 53

Modelling the effects of tied-ridging on water conservation and crop yields, 16 (1989) 87

Effect of soil matric potential and nitrogen on growth, yield, nutrient uptake and water use of

banana, 16 (1989) 109

Irrigation with brackish water under desert conditions, VIII. further studies on Onion (Allium cepa L.) production with brackish water, 16 (1989) 201

Prediction of sustained sodic irrigation effects on soil sodium saturation and crop yields, 16 (1989) 217

Deficit irrigation effects on head cabbage production, 16 (1989) 229

Effects on irrigation frequency and watertable depths on root growth and yield of tomato in a tropical soil, 16 (1989) 241

A statistical analysis of the effect of drainage conditions and nitrogen fertilizer on apple production, 16 (1989) 251

Rainwater harvesting for the management of agricultural droughts in the foothills of northern India, 16 (1989) 309

Plant water relations and irrigation management, 17 (1990) 59

Importance of irrigation regime, dripline placement and row spacing in the drip irrigation of sugar cane, 17 (1990) 75

Canopy temperature as an indicator of differential water use and yield performance among wheat cultivars, 18 (1990) 35

Water and fertilizer interrelations with irrigated maize, 18 (1990) 49

Dynamics of root and shoot growth of barley under various levels of salinity and water stress, 18 (1990) 63

Water use and yield relationships of irrigated potato, 18 (1990) 173

Effect of intermittent irrigation on groundwater table contribution, irrigation requirement and yield of rice in Mollisols of the Tarai Region, 18 (1990) 231

Effect of irrigation scheduling on growth, yield and evapotranspiration of wheat in sodic soils, 18 (1990) 267

Production functions relating crop yield, water quality and quantity, soil salinity and drainage volume, 19 (1991) 51

Cotton response to nonuniform and varying depths of irrigation, 19 (1991) 151

Effect of evapotranspiration underprediction on irrigation scheduling and yield of corn: a simulation study, 19 (1991) 167

Effects of trickle irrigation on the growth and sunscald of bell peppers (Capsicum annuum L.) in southern Quebec, 19 (1991) 181

Three years experience with an on-farm macro-catchment water harvesting system in Botswana, 19 (1991) 191

Irrigation of wheat with saline drainage water on a sandy loam soil, 19 (1991) 223

A comparison between drip and furrow irrigation in cotton at two levels of water supply, 19 (1991) 313

Effect of varying water regimes on soil physical properties and yield of rice in mollisols of Tarai region, 20 (1991) 71

Effect of sodic irrigation and gypsum on the reclamation of sodic soil and growth of rice and wheat plants, 20 (1991) 163

Supplementary irrigation for sequential cropping in the Ethiopian highland vertisols using broadbed and furrow land management system, 20 (1991) 173

Response of wheat to irrigation with saline water varying in anionic constituents and phosphorus application, 20 (1991) 223

Effect of high salinity and SAR waters on salinization, sodication and yields of pearl-millet and wheat, 21 (1992) 93

Effect of salinity on water stress, growth and yield of broadbeans, 21 (1992) 107

Econometric consideration for reuse of drainage effluent in wheat production, 22 (1992) 249

Effect of continuous irrigation with sodic and saline-sodic waters on soil properties and crop yields under cotton-wheat rotation in northwestern India, 22 (1992) 345

Scheduling irrigation for peanuts with variable amounts of available water, 23 (1993) 1

Conjunctive use of saline and non-saline waters, I. Response of wheat to initial salinity profiles and salinisation patterns, 23 (1993) 125

Conjunctive use of saline and non-saline waters, II. Field comparisons of cyclic uses and mixing for wheat, 23 (1993) 139

Effect of irrigation on growth, yield and evapotranspiration of mustard (*Brassica juncea*) in partially reclaimed sodic soils, 23 (1993) 225

Effect of saline water on soil salinity and on water stress, growth, and yield of wheat and potatoes, 23 (1993) 247

Water use and yields of cotton grown under wide-spaced furrow irrigation, 24 (1993) 27

Water use, wetted soil volume, root distribution and yield of avocado under drip irrigation, 24 (1993) 119

Alternate-furrow irrigation for soybean production, 24 (1993) 133

Effect of saline water on establishment of windbreak trees, 25 (1994) 35 Using water of marginal quality for crop production: major issues, 25 (1994) 233

Irrigation with poor quality water (Review), 25 (1994) 271

Crop yield estimation

Remote sensing for agricultural water management and crop yield prediction, 1 (1978) 299

Drought detection

Drought detection and quantification by reflectance and thermal responses, 7 (1983) 303

Drought resistance (tolerance)

Water potential and turgor pressure as a selection basis for wind-grown winter wheat, 1 (1978) 343

Drought resistance and wheat breeding, 7 (1983) 181

Genetic and physiological relationships in plant breeding for drought resistance, 7 (1983) 195

Drought tolerant sorghum and cotton germplasm, 7 (1983) 207

Drought tolerance in US maize, 7 (1983) 223

Subcellular mechanisms of plant response to low water potential, 7 (1983) 239

Roots and drought resistance, 7 (1983) 265

Strategies for crop improvement for droughtprone regions, 7 (1983) 281

Response of groundnut to drought stress in different growth phases, 15 (1989) 301

Soil water depletion by sunflower and sorghum under rainfed conditions, 24 (1993) 49

Early seedling growth

Saline water management for optimum crop production, 24 (1993) 189

Effect of saline water on establishment of windbreak trees, 25 (1994) 35

Germination

Irrigation with brackish water under desert conditions, III. Methods for achieving good germination under sprinkler irrigation with brackish water, 10 (1985) 335

Irrigation with brakish water under desert conditions, V. Nitrogen requirement of tomatoes (*Lycopersicon esculentum Mill.*) during germination under drip irrigation, 11 (1986) 313

Irrigation with brackish water under desert conditions, VIII. further studies on Onion (Allium cepa L.) production with brackish water, 16 (1989) 201

Development of soil salinity during germination and early seedling growth and its effect on several crops, 20 (1991) 17

Effect of superabsorbent polymers on survival and growth of crop seedlings, 20 (1991) 63

Saline water management for optimum crop production, 24 (1993) 189

Growth stage

Yield response of a semi-dwarf wheat variety to irrigation on a calcareous brown flood plain soil of Bangladesh, 3 (1981) 217

Evapotranspiration, pan evaporation and soil water relationships for wheat (*Triticum aestivum*), 13 (1988) 65

Response of groundnut to drought stress in different growth phases, 15 (1989) 301

Maize root development under various levels of salinity and water distribution, 15 (1989) 377

The tolerance of sugarcane to water stress during its main development phases, 17 (1990) 117

Dynamics of root and shoot growth of barley under various levels of salinity and water stress, 18 (1990) 63

Effect of irrigation scheduling on growth, yield and evapotranspiration of wheat in sodic soils, 18 (1990) 267

Crop water stress index for seed alfalfa: influences of within-season changes in plant morphology, 19 (1991) 135

Moisture stress and the water use efficiency of mustard, 20 (1991) 245

Issues in irrigation, 22 (1992) 3

Scheduling irrigation for peanuts with variable amounts of available water, 23 (1993) 1

Conjunctive use of saline and non-saline waters, I. Response of wheat to initial salinity profiles and salinisation patterns, 23 (1993) 125

Conjunctive use of saline and non-saline waters, II. Field comparisons of cyclic uses and mixing for wheat, 23 (1993) 139

Effect of irrigation on growth, yield and evapotranspiration of mustard (*Brassica juncea*) in partially reclaimed sodic soils, 23 (1993) 225

Saline water management for optimum crop production, 24 (1993) 189

Leaf area

Photosynthetic activity during stress, 7 (1983) 249 Irrigated guayule — plant growth and production, 10 (1985) 81

Plant water relations and irrigation management, 17 (1990) 59

Plant-water relations of sugar cane (Saccharum officinarum L.) under a range of irrigated treatments, 17 (1990) 95

Effect of salinity on water stress, growth and yield of broadbeans, 21 (1992) 107

Leaf area index

Simulation of evapotranspiration by trees, 19 (1991) 205

Physiological studies in young Eucalyptus stands in southern India and derived estimates of forest transpiration, 24 (1993) 103

Leaf (canopy) temperature

Response of sorghum to moisture stress using line source sprinkler irrigation, 3 (1981) 279

Surface temperature variability patterns within irrigated fields, 8 (1984) 429

Irrigated guayule — evapotranspiration and plant water stress, 10 (1985) 61

Utilization of thermal infrared thermometry for detection of water stress in spring barley, 12 (1986) 75

An application of remote sensing and soil water balance simulation models to determine the effect of groundwater extraction on crop evapotranspiration, 15 (1989) 315

Canopy temperature as an indicator of differential water use and yield performance among wheat cultivars, 18 (1990) 35

Effect of salinity on water stress, growth and yield of broadbeans, 21 (1992) 107

Canopy temperature to assess daily evapotranspiration and management of high frequency drip irrigation systems, 22 (1992) 379

Soil water depletion by sunflower and sorghum under rainfed conditions, 24 (1993) 49

Leaf osmotic potential

Irrigation with brackish water under desert conditions, II. Physiological and yield response of maize (Zea Mays) to continuous irrigation with brackish water and to alternating brackish-fresh-brackish water irrigation, 10 (1985) 47

Irrigation with brackish water under desert conditions, IV. Salt tolerance studies with lettuce (Lactuca sativa L.), 11 (1986) 303

Irrigation with brackish water under desert conditions, VII. Effect of time of application of brackish water on production of processing tomatoes (Lycopersicon esculentum Mill.), 12 (1986) 149

Plant water relations and irrigation management, 17 (1990) 59

Leaf (plant) water potential

Soil and plant water status under sprinkling and trickling, 1 (1976) 33

Water potential and turgor pressure as a selection basis for wind-grown winter wheat, 1 (1978) 343

Leaf osmotic potential as an indicator of crop water deficit and irrigation need in rapeseed (Brassica napus L.), 1 (1978) 351

Trickle irrigation timing and its effect on plant and soil water status, 2 (1979) 225

Water and salt transport, water uptake, and leaf water potentials during regular and suspended high frequency irrigation of citrus, 2 (1979) 241

Response of sorghum to moisture stress using line source sprinkler irrigation, 3 (1981) 279

The effect of leaf water status on stomatal activity, transpiration and nitrate reductase of sweet potato, 4 (1981) 465

Irrigation with brackish water under desert conditions, II. Physiological and yield response of maize (Zea Mays) to continuous irrigation with brackish water and to alternating brackishfresh-brackish water irrigation, 10 (1985) 47

Utilization of thermal infrared thermometry for detection of water stress in spring barley, 12 (1986) 75

Irrigation with brackish water under desert conditions, VII. Effect of time of application of brackish water on production of processing tomatoes (*Lycopersicon esculentum Mill.*), 12 (1986) 149

Climate-normalized cotton leaf water potentials for irrigation scheduling, 12 (1987) 293

Plant water relations and irrigation management, 17 (1990) 59

Plant-water relations of sugar cane (Saccharum officinarum L.) under a range of irrigated treatments, 17 (1990) 95

A comparison between drip and furrow irrigation in cotton at two levels of water supply, 19 (1991) 313

Relationships between normalized leaf water potential and crop water stress index values for acala cotton, 20 (1991) 109

Effect of salinity on water stress, growth and yield of broadbeans, 21 (1992) 107

Canopy temperature to assess daily evapotranspiration and management of high frequency drip irrigation systems, 22 (1992) 379

Effect of saline water on soil salinity and on water stress, growth, and yield of wheat and potatoes, 23 (1993) 247 Soil water depletion by sunflower and sorghum under rainfed conditions, 24 (1993) 49

Physiological studies in young Eucalyptus stands in southern India and derived estimates of forest transpiration, 24 (1993) 103

Irrigation effects on growth and water use of Quercus virginiana (Mill.) on a Texas lignite surface-mined site, 24 (1993) 265

Relationships between leaf water potential, CWSI, yield and fruit quality of sweet lime under drip irrigation, 25 (1994) 13

Leaf nitrate reductase

The effect of leaf water status on stomatal activity, transpiration and nitrate reductase of sweet potato, 4 (1981) 465

Photosynthesis

Subcellular mechanisms of plant response to low water potential, 7 (1983) 239

Photosynthetic activity during stress, 7 (1983) 249 Plant-water relations of sugar cane (Saccharum officinarum L.) under a range of irrigated treatments, 17 (1990) 95

Root growth (depth, development, distribution)

Yield, water use and root distribution of wheat as affected by pre-sowing and post-sowing irrigation, 2 (1980) 289

Wheat root distribution, water extraction pattern and grain yield as influenced by time and rate of irrigation, 3 (1980) 115

Wheat root growth, grain yield and water uptake as influenced by soil water regime and depth of nitrogen placement in a loamy sand soil, 6 (1983) 365

Farm management and the function of field crop root systems, 7 (1983) 115

Roots and drought resistance, 7 (1983) 265

Strategies for crop improvement for droughtprone regions, 7 (1983) 281

Estimation of soil-water extraction patterns by roots, 12 (1987) 271

Effect of watertable on yield and root depth of winter wheat in the French West Central Atlantic Marshlands, 14 (1988) 35

Maize root development under various levels of salinity and water distribution, 15 (1989) 377

Effects on irrigation frequency and watertable depths on root growth and yield of tomato in a tropical soil, 16 (1989) 241

Dynamics of root and shoot growth of barley under various levels of salinity and water stress, 18 (1990) 63 Water use, wetted soil volume, root distribution and yield of avocado under drip irrigation, 24 (1993) 119

Root osmotic potential

Osmotoc potentials of roots of onions and their rhizospheric soil solutions when irrigated with saline drainage waters (Short Communications), 3 (1981) 317

Salt tolerance (resistance)

Development of soil salinity during germination and early seedling growth and its effect on several crops, 20 (1991) 17

Irrigation with brackish water under desert conditions. IX. The salt tolerance of six forage crops, 24 (1993) 321

Effect of saline water on establishment of windbreak trees, 25 (1994) 35

Sowing (planting) date

An integrated model-approach to the effect of water management on crop yield, 1 (1976) 3

Water Use and water-use efficiency of wheat and barley in relation to seeding dates, levels of irrigation and nitrogen fertilization, 3 (1981) 305

Optimum sorghum planting dates in western Sudan by simulated water budgets, 13 (1988) 33

Rainfall irregularity and sowing strategies in Southern Mozambique, 13 (1988) 49

Stomatal conductance (resistance)

Water potential and turgor pressure as a selection basis for wind-grown winter wheat, 1 (1978) 343

Response of sorghum to moisture stress using line source sprinkler irrigation, 3 (1981) 279

The effect of leaf water status on stomatal activity, transpiration and nitrate reductase of sweet potato, 4 (1981) 465

Plant-water relations of sugar cane (Saccharum officinarum L.) under a range of irrigated treatments, 17 (1990) 95

Canopy temperature as an indicator of differential water use and yield performance among wheat cultivars, 18 (1990) 35

Simulation of evapotranspiration by trees, 19 (1991) 205

Effect of salinity on water stress, growth and yield of broadbeans, 21 (1992) 107

Effect of saline water on soil salinity and on water stress, growth, and yield of wheat and potatoes, 23 (1993) 247 Soil water depletion by sunflower and sorghum under rainfed conditions, 24 (1993) 49

Physiological studies in young Eucalyptus stands in southern India and derived estimates of forest transpiration, 24 (1993) 103

Irrigation effects on growth and water use of Quercus virginiana (Mill.) on a Texas lignite surface-mined site, 24 (1993) 265

Transpiration

Water use in lowland rice cultivation in Asia: a review of evapotranspiration, 3 (1980) 83

The effect of leaf water status on stomatal activity, transpiration and nitrate reductase of sweet potato, 4 (1981) 465

Increasing atmospheric CO₂: effects on crop yield, water use and climate, 7 (1983) 55

Water use of eucalypts — a review with special reference to South India, 11 (1986) 333

Soil water depletion by sunflower and sorghum under rainfed conditions, 24 (1993) 49

Physiological studies in young Eucalyptus stands in southern India and derived estimates of forest transpiration, 24 (1993) 103

Dynamics of water use in a dry mediterranean environment, I. Soil Evaporation little affected by presence of plant canopy, 24 (1993) 205

Irrigation effects on growth and water use of Quercus virginiana (Mill.) on a Texas lignite surface-mined site, 24 (1993) 265

Observations and modeling of interactions between barley yield and evapotranspiration in the subarctic, 25 (1994) 109

Turgor pressure

Water potential and turgor pressure as a selection basis for wind-grown winter wheat, 1 (1978) 343

Water production function (crop water production function, crop production function, water use-yield relation, crop yield-water use function)

A model for optimal allocation of canal water based on crop production functions, 2 (1979) 79

Crop production functions and the allocation and use of irrigation water, 3 (1980) 53

Decision models for optimal cropping patterns in irrigations based on crop water production functions, 3 (1980) 65

A method for applying crop sensitivity factors in irrigation scheduling, 5 (1982) 335

Water use-yield relations for cowpea and maize, 9 (1984) 219

Performance irrigation parameters and their relationship to surface-irrigation design variables and yield, 10 (1985) 159

Economic evaluation of salinity, drainage and non-uniformity of infiltrated irrigation water, 10 (1985) 221

Water production function of sorghum for northeast Brazil, 11 (1986) 169

Water production functions for wheat under different environmental conditions, 11 (1986) 319 A simple dated water-production function for use

in irrigated agriculture, 13 (1988) 25
Modelling derived demand for irrigation water,

Modelling derived demand for irrigation water, 13 (1988) 403

Production functions relating crop yield, water quality and quantity, soil salinity and drainage volume, 19 (1991) 51

Conjunctive use of saline and non-saline waters, III. Validation and applications of a transient model for wheat, 23 (1993) 149

Water use and yields of cotton grown under wide-spaced furrow irrigation, 24 (1993) 27

Using water of marginal quality for crop production: major issues, 25 (1994) 233

Irrigation with poor quality water (Review), 25 (1994) 271

7.2. Crops

Alfalfa (Medicago sativa)

Evaluation of simplified water-crop yield models, 2 (1979) 95

Water use by alfalfa, maize, and barley as influenced by available soil water, 6 (1983) 351

Minimizing salt in drain water by irrigation management — leaching studies with alfalfa, 9 (1984) 89

Crop water stress index for seed alfalfa: influences of within-season changes in plant morphology, 19 (1991) 135

Irrigation with brackish water under desert conditions. IX. The salt tolerance of six forage crops, 24 (1993) 321

Almond (Prunus amygdatus)

Effect of variations in soil properties and precipitation on micro-catchment water balance, 12 (1987) 177

Apple (Malus sylvestris)

Observations of soil water and salt movement under drip and flood irrigation in an apple orchard, 1 (1977) 179 A statistical analysis of the effect of drainage conditions and nitrogen fertilizer on apple production, 16 (1989) 251

Avocado (Fersea americana)

Water use, wetted soil volume, root distribution and yield of avocado under drip irrigation, 24 (1993) 119

Banana (Musa species)

Supplemental irrigation of bananas in St. Lucia, 9 (1984) 149

Effect of soil matric potential and nitrogen on growth, yield, nutrient uptake and water use of banana, 16 (1989) 109

Barley (Hordeum vulgare)

Water use and water-use efficiency of wheat and barley in relation to seeding dates, levels of irrigation and nitrogen fertilization, 3 (1981) 305

Leaching requirement for salinity control, III. Barley, cowpea, and celery, 6 (1983) 1

Water use by alfalfa, maize, and barley as influenced by available soil water, 6 (1983) 351

Utilization of thermal infrared thermometry for detection of water stress in spring barley, 12 (1986) 75

Dynamics of root and shoot growth of barley under various levels of salinity and water stress, 18 (1990) 63

Effect of superabsorbent polymers on survival and growth of crop seedlings, 20 (1991) 63

Observations and modeling of interactions between barley yield and evapotranspiration in the subarctic, 25 (1994) 109

Rermuda grass (Cynodon dactylon)

Irrigation with brackish water under desert conditions. IX. The salt tolerance of six forage crops, 24 (1993) 321

Berseem (Trifolium alexandrinum)

Decision models for optimal cropping patterns in irrigations based on crop water production functions, 3 (1980) 65

Rainwater harvesting for the management of agricultural droughts in the foothills of northern India, 16 (1989) 309

Broadbean (Vicia faba)

Relations between available and extractable soil water and evapotranspiration from a bean crop, 9 (1984) 193 Within-row irrigation saves water on croplands, 11 (1986) 31

Effect of salinity on water stress, growth and yield of broadbeans, 21 (1992) 107

Cabbage, cauliflower (Brassica oleracea)

Leaching requirement for salinity control, II. Oat, tomato, and cauliflower, 4 (1981) 393

Use of an hydrophilic polymer to improve water storage and availability to crops grown in sand dunes, II. Cabbage irrigated by sprinkling with different water salinities, 23 (1993) 315

Cantaloupe (Cucumis melo)

Irrigation scheduling and cantaloupe yield model for the Jordan Valley, 15 (1988) 177

Casuarina (Casuarina equisetifolia)

Effect of saline water on establishment of windbreak trees, 25 (1994) 35

Celery (Apium graveolens)

Leaching requirement for salinity control, III. Barley, cowpea, and celery, 6 (1983) 1

Chickpea (Cicer arientinum)

Water use, water-use efficiency and yield of dryland chickpea as influenced by P fertilization, stored soil water and crop season rainfall, 2 (1980) 299

Supplementary irrigation for sequential cropping in the Ethiopian highland vertisols using broadbed and furrow land management system, 20 (1991) 173

Citrus (Citrus sinensis)

Water and salt transport, water uptake, and leaf water potentials during regular and suspended high frequency irrigation of citrus, 2 (1979) 241

Minimizing salt in drain water by irrigation management — Arizona field studies with citrus, 9 (1984) 61

Clusterbean (Cyamopsis tetragonobola)

Effect of grass mulching on growth and yield of legumes, 6 (1983) 375

Cotton (Gossypium hirsutum)

Decision models for optimal cropping patterns in irrigations based on crop water production functions, 3 (1980) 65

Infrared thermometry: a remote sensing technique for predicting yield in water-stressed cotton, 6 (1983) 385 Farm management and the function of field crop root systems, 7 (1983) 115

Drought tolerant sorghum and cotton germplasm, 7 (1983) 207

Yield of single versus twin-row trickle irrigated cotton, 9 (1984) 237

Cotton response to short-term waterlogging imposed with a watertable gradient facility, 10 (1985) 127

Trickle irrigation of cotton: effect on soil chemical properties, 11 (1986) 159

Climate-normalized cotton leaf water potentials for irrigation scheduling, 12 (1987) 293

Enhancement of crop yields from subsurface drains with various envelopes, 15 (1988) 131

Modelling the effects of tied-ridging on water conservation and crop yields, 16 (1989) 87

Crop coefficients of some major crops of the Nigerian semi-arid tropics, 18 (1990) 159

Cotton response to nonuniform and varying depths of irrigation, 19 (1991) 151

A comparison between drip and furrow irrigation in cotton at two levels of water supply, 19 (1991) 313

Relationships between normalized leaf water potential and crop water stress index values for acala cotton, 20 (1991) 109

Effect of continuous irrigation with sodic and saline-sodic waters on soil properties and crop yields under cotton-wheat rotation in northwestern India, 22 (1992) 345

Evaluating three cotton simulation models under different irrigation regimes, 22 (1992) 391

Water use and yields of cotton grown under wide-spaced furrow irrigation, 24 (1993) 27

Saline water management for optimum crop production, 24 (1993) 189

Cowpea (Vigna unguiculata)

Leaching requirement for salinity control, III. Barley, cowpea, and celery, 6 (1983) 1

Water use-yield relations for cowpea and maize, 9 (1984) 219

Irrigation scheduling effects on yield and phosphorus uptake of cowpea, 10 (1985) 343

Dewgram (Phaseolus aconitifolius)

Effect of grass mulching on growth and yield of legumes, 6 (1983) 375

Eucalyptus (Eucalyptus species)

Evapotranspiration from a eucalyptus community, 8 (1984) 41

Determination of the evapotranspiration of E. Regnans forested catchments using hydrological measurements, 8 (1984) 57

Water use of eucalypts — a review with special reference to South India, 11 (1986) 333

Management of sandplain seeps in the wheatbelt of Western Australia, 19 (1991) 85

Hydrologic and salinity changes associated with tree plantations in a saline agricultural catchment in southwestern Australia, 22 (1992) 307

Physiological studies in young Eucalyptus stands in southern India and derived estimates of forest transpiration, 24 (1993) 103

Effect of saline water on establishment of windbreak trees, 25 (1994) 35

The influence of groundwater levels and salinity of a multi-specied tree plantation in the 500 mm rainfall region of south-western Australia, 25 (1994) 185

Grape (Vitis vinifera)

Water use of Vitis vinifera grapes in Washington, 23 (1993) 109

Greengram (Vigna radiata)

Effect of grass mulching on growth and yield of legumes, 6 (1983) 375

Groundnut (Arachis hypogaea)

Frequency and depth of irrigation for groundnut, 3 (1980) 45

Crop coefficients for peanut evapotranspiration, 15 (1988) 155

Response of groundnut to drought stress in different growth phases, 15 (1989) 301

Crop coefficients of some major crops of the Nigerian semi-arid tropics, 18 (1990) 159

Estimation of water uptake pattern of groundnut (Arachis hypogaea L.), 21 (1992) 137

Special Issue: "Planning and Management of Irrigation Systems in Developing Countries", 22 (1992) 1

Guayule (Parthenium angentatum)

Irrigated guayule — evapotranspiration and plant water stress, 10 (1985) 61

Irrigated guayule — plant growth and production, 10 (1985) 81

Irrigated guayule — production and water use relationships, 10 (1985) 95

Water quantity and quality requirements of guayule: current assessment, 10 (1985) 205

Headcabbage (Brassica oleracea capitata)

Deficit irrigation effects on head cabbage production, 16 (1989) 229

Hop (Humulus lupulus)

Yield and quality of furrow and trickle irrigated hop (Humulus Lupulus L.) in Washington State, 7 (1983) 457

Jujube (Zizyphus mauritania)

Effect of runoff concentration on growth and yield of jujube, 5 (1982) 73

Kallar grass (Leptochloa fusca)

Irrigation with brackish water under desert conditions. IX. The salt tolerance of six forage crops, 24 (1993) 321

Legumes (Leguminosae)

Response of selected legume companion crops to irrigation frequencies, 17 (1990) 257

Lettuce (Lactuca sativa)

Leaching requirement for salinity control, I. Wheat, sorghum, and lettuce, 2 (1979) 177

Irrigation with brackish water under desert conditions, IV. Salt tolerance studies with lettuce (Lactuca sativa L.), 11 (1986) 303

Effect of superabsorbent polymers on survival and growth of crop seedlings, 20 (1991) 63

Live oak (Quercus virginiana)

Irrigation effects on growth and water use of Quercus virginiana (Mill.) on a Texas lignite surface-mined site, 24 (1993) 265

Maize (Zea mays)

Evaluation of simplified water-crop yield models, 2 (1979) 95

Frequency and amount of irrigation for maize in western Nigeria, 2 (1979) 233

Evapotranspiration relationship with pan evaporation and evapotranspiration ratio of corn under different nitrogen levels and moisture regimes, 3 (1981) 227

Predicting the effects of drainage systems on corn yields, 5 (1982) 127

Crop water requirements for rainfed and irrigated grain corn in China, 6 (1983) 43

Water use by alfalfa, maize, and barley as influenced by available soil water, 6 (1983) 351

Drought tolerance in US maize, 7 (1983) 223

Water use-yield relations for cowpea and maize, 9 (1984) 219

Spatial variability of rainfall and yield of maize in a semi-arid region, 10 (1985) 13

Irrigation with brackish water under desert conditions, II. Physiological and yield response of maize (Zea Mays) to continuous irrigation with brackish water and to alternating brackish-fresh-brackish water irrigation, 10 (1985) 47

Estimating watertable contribution to the water supply of maize, 11 (1986) 221

Estimation of soil-water extraction patterns by roots, 12 (1987) 271

Maize root development under various levels of salinity and water distribution, 15 (1989) 377

Modelling the effects of tied-ridging on water conservation and crop yields, 16 (1989) 87

Rainwater harvesting for the management of agricultural droughts in the foothills of northern India, 16 (1989) 309

The relative importance of competition for water and for light in intercropping of sugar cane with maize, 17 (1990) 233

The partitioning of light and water in drip irrigated plant cane with a maize intercrop, 17 (1990) 235

Water and fertilizer interrelations with irrigated maize, 18 (1990) 49

Crop coefficients of some major crops of the Nigerian semi-arid tropics, 18 (1990) 159

Effect of evapotranspiration underprediction on irrigation scheduling and yield of corn: a simulation study, 19 (1991) 167

The water-use efficiency of winter wheat and maize on a salt-affected soil in the Huang Huai Hai river plain of China, 23 (1993) 67

Use of an hydrophilic polymer to improve water storage and availability to crops grown in sand dunes, I. Corn irrigated by trickling, 23 (1993) 303

Mustard (Brassica juncea)

Decision models for optimal cropping patterns in irrigations based on crop water production functions, 3 (1980) 65

Moisture stress and the water use efficiency of mustard, 20 (1991) 245

Effect of irrigation on growth, yield and evapotranspiration of mustard (Brassica juncea) in partially reclaimed sodic soils, 23 (1993) 225

Oat (Avena sativa)

Leaching requirement for salinity control, II. Oat, tomato, and cauliflower, 4 (1981) 393

Onion (Allium cepa)

Irrigation with brackish water under desert conditions, I. Problems and solutions in production of onions (Allium Cepa L.), 9 (1984) 225

Irrigation with brackish water under desert conditions, VIII. further studies on Onion (Allium cepa L.) production with brackish water, 16 (1989) 201

Peach (Prunus persica)

Water balance and pattern of soil water uptake in a peach orchard, 11 (1986) 145

Pearlmillet (Pennisetum glaucum)

Effect of high salinity and SAR waters on salinization, sodication and yields of pearl-millet and wheat, 21 (1992) 93

Seasonal water balance of a sandy soil in Niger cropped with pearl millet, based on profile moisture measurements, 21 (1992) 313

Pepper (Capsicum annuum)

Yield and quality of trickle-irrigated chile peppers, 9 (1985) 339

Effects of trickle irrigation on the growth and sunscald of bell peppers (Capsicum annuum L.) in southern Quebec, 19 (1991) 181

Potato (Solanum tuberosum)

The dependence of irrigation requirements on watertable depth in drained lands, 1 (1977) 191 Influence of irrigation on the development and yield of potatoes, 5 (1982) 171

Obtaining soil physical field data for simulating soil moisture regimes and associated potato growth, 5 (1982) 319

Water use and yield relationships of irrigated potato, 18 (1990) 173

Effect of saline water on soil salinity and on water stress, growth, and yield of wheat and potatoes, 23 (1993) 247

Modelling soil water status for irrigation scheduling in potatoes, I. Description and sensitivity analysis, 23 (1993) 329

Modelling soil water status for irrigation scheduling in potatoes, II. Validation, 23 (1993) 343

Rosopis juliflora

Effect of saline water on establishment of windbreak trees, 25 (1994) 35

Rapeseed (Brassica napus)

Leaf osmotic potential as an indicator of crop water deficit and irrigation need in rapeseed (Brassica napus L.), 1 (1978) 351 Rhodes grass (Chloris gayana)

Irrigation with brackish water under desert conditions. IX. The salt tolerance of six forage crops, 24 (1993) 321

Rice (Orvza sativa)

Water balance estimates of evaporation from ponded rice fields in a semi-arid region, 1 (1976) 89

Water balance of flooded rice paddies, 1 (1978) 277

Evaluation of water management systems in a tubewell irrigated farm, 2 (1979) 67

Decision models for optimal cropping patterns in irrigations based on crop water production functions, 3 (1980) 65

Water use in lowland rice cultivation in Asia: a review of evapotranspiration, 3 (1980) 83

Reclaiming a saline-sodic, sandy loam soil under rice production, 5 (1982) 61

Twenty years of research on reclamation of saltaffected soils in Romanian rice fields, 9 (1984)

Water losses through the bunds of irrigated rice fields interpreted through an analogue model, 11 (1986) 59

Water requirement for irrigated rice in a semiarid region in West Africa, 11 (1986) 75

Irrigation requirements of rice under shallow watertable conditions, 12 (1986) 127

Enhancement of crop yields from subsurface drains with various envelopes, 15 (1988) 131

PUMPMOD: a simulation model for multipump rice irrigation systems, 15 (1989) 333

Impact of varying water supply on input use and yields of tank-irrigated rice, 15 (1989) 347

Effect of gypsum and sodic irrigation water on soil and crop yields in a rice-wheat rotation, 16 (1989) 53

Prediction of sustained sodic irrigation effects on soil sodium saturation and crop yields, 16 (1989) 217

Simulation model use for analyzing decision variables in multipump rice irrigation system operation, 17 (1990) 339

Hydrological analysis of farm reservoirs in rainfed rice areas, 17 (1990) 351

Effect of intermittent irrigation on groundwater table contribution, irrigation requirement and yield of rice in Mollisols of the Tarai Region, 18 (1990) 231

A modified layout of the subsurface drainage system for rice areas in the Nile Delta, Egypt, 19 (1991) 289 Effect of varying water regimes on soil physical properties and yield of rice in mollisols of Tarai region, 20 (1991) 71

Effect of sodic irrigation and gypsum on the reclamation of sodic soil and growth of rice and wheat plants, 20 (1991) 163

A model to evaluate intensive vs. extensive irrigation practices for irrigated rice production system in Bangladesh, 20 (1991) 233

Irrigation requirement of transplanted monsoon rice in Bangladesh, 23 (1993) 199

Safflower (Carthamus tinctorius)

Development of soil salinity during germination and early seedling growth and its effect on several crops, 20 (1991) 17

Salt grass (Distichlis spicata)

Irrigation with brackish water under desert conditions. IX. The salt tolerance of six forage crops, 24 (1993) 321

Seashore paspalum (Paspalum vaginatum)

Irrigation with brackish water under desert conditions. IX. The salt tolerance of six forage crops, 24 (1993) 321

Sorghum (Sorghum bicolor)

Effect of vertical mulch on moisture conservation and yield of sorghum in vertisols, 1 (1978) 333 Evaluation of simplified water-crop yield models,

2 (1979) 95

Leaching requirement for salinity control, I.
Wheat, sorghum, and lettuce, 2 (1979) 177

Response of sorghum to moisture stress using line source sprinkler irrigation, 3 (1981) 279

A method for applying crop sensitivity factors in irrigation scheduling, 5 (1982) 335

Drought tolerant sorghum and cotton germplasm, 7 (1983) 207

Strategies for crop improvement for droughtprone regions, 7 (1983) 281

Drought detection and quantification by reflectance and thermal responses, 7 (1983) 303

Water production function of sorghum for northeast Brazil, 11 (1986) 169

Optimum sorghum planting dates in western Sudan by simulated water budgets, 13 (1988) 33

Yield variability and water use in wide-spaced furrow irrigation, 16 (1989) 15

Modelling the effects of tied-ridging on water conservation and crop yields, 16 (1989) 87

Crop coefficients of some major crops of the Nigerian semi-arid tropics, 18 (1990) 159

Three years experience with an on-farm macro-catchment water harvesting system in Botswana, 19 (1991) 191

Development of soil salinity during germination and early seedling growth and its effect on several crops, 20 (1991) 17

Soil water depletion by sunflower and sorghum under rainfed conditions, 24 (1993) 49

Soybean (Glycinemax)

Farm management and the function of field crop root systems, 7 (1983) 115

Effects of alternate-furrow irrigation: water conservation on the yields of two soybean cultivars, 10 (1985) 253

Soybean root water uptake in two soils, 15 (1989) 387

Alternate-furrow irrigation for soybean production, 24 (1993) 133

Sugarbeed (Beta vulgaris)

Effect of irrigation and harvesting dates on the yield of spring-sown sugar-beet, 5 (1982) 345

Sugarcane (Saccharum officinarum)

Sugarcane response to irrigation and straw mulch in a subtropical region, 3 (1980) 35

Decision models for optimal cropping patterns in irrigations based on crop water production functions, 3 (1980) 65

An economic evaluation of sugar cane production under different water supply systems in Thailand, 13 (1988) 83

Dragline irrigation, practical experiences with sugar cane, 17 (1990) 25

A low head drip irrigation system for smallholdings, 17 (1990) 37

The reticulation of ethanol stillage through irrigation systems and its use for fertilisation of sugarcane in Zimbabwe, 17 (1990) 49

Importance of irrigation regime, dripline placement and row spacing in the drip irrigation of sugar cane, 17 (1990) 75

Plant-water relations of sugar cane (Saccharum officinarum L.) under a range of irrigated treatments, 17 (1990) 95

The tolerance of sugarcane to water stress during its main development phases, 17 (1990) 117

Irrigation research, development and practice in Mauritius, 17 (1990) 129

Experience with approximately 600 hectare of drip irrigation at Simunye Sugar Estate, Swaziland, 17 (1990) 151 The control of drip irrigation of sugarcane using 'index' tensiometers: some comparisons with control by the water budget method, 17 (1990) 189

Use of pan evaporation for estimating the total dose and programming the irrigation of sugarcane, 17 (1990) 209

The relative importance of competition for water and for light in intercropping of sugar cane with maize, 17 (1990) 233

The partitioning of light and water in drip irrigated plant cane with a maize intercrop, 17 (1990) 235

Response of selected legume companion crops to irrigation frequencies, 17 (1990) 257

Influence of drip irrigation emission rate on distribution and drainage of water beneath a sugar cane and a fallow plot, 17 (1990) 267

A comparative study of the financial and economic viability of drip and overhead irrigation of sugarcane in Mauritius, 17 (1990) 307

An assessment of drip irrigation of sugar cane on poorly structured soils in Swaziland, 17 (1990) 325

Contrasting soil moisture environments beneath sugar cane drip irrigated during the day, and at night, 22 (1992) 271

Sunflower (Helianthus annuus)

Trickle irrigation of sunflower with municipal wastewater, 19 (1991) 67

Development of soil salinity during germination and early seedling growth and its effect on several crops, 20 (1991) 17

Soil water depletion by sunflower and sorghum under rainfed conditions, 24 (1993) 49

Sweet lime (Citrus limetta)

Relationships between leaf water potential, CWSI, yield and fruit quality of sweet lime under drip irrigation, 25 (1994) 13

Sweet potato (Convolvulus batatus)

The effect of leaf water status on stomatal activity, transpiration and nitrate reductase of sweet potato, 4 (1981) 465

Tall fescue (Festuca elatior)

Response of tall fescue to irrigation water salinity, leaching fraction, and irrigation frequency, 7 (1983) 439

Tomato (Lycopersicon esculentum)

Irrigation frequency and total water application with trickle and furrow systems, 1 (1976) 21

Soil and plant water status under sprinkling and trickling, 1 (1976) 33

Trickle irrigation timing and its effect on plant and soil water status, 2 (1979) 225

Leaching requirement for salinity control, II. Oat, tomato, and cauliflower, 4 (1981) 393

Irrigation with brakish water under desert conditions, V. Nitrogen requirement of tomatoes (Lycopersicon esculentum Mill.) during germination under drip irrigation, 11 (1986) 313

Fresh market tomato yields as affected by deficit irrigation using a micro-irrigation system, 12

(1986) 117

Irrigation with brackish water under desert conditions, VII. Effect of time of application of brackish water on production of processing tomatoes (*Lycopersicon esculentum Mill.*), 12 (1986) 149

Effects on irrigation frequency and watertable depths on root growth and yield of tomato in a tropical soil, 16 (1989) 241

Effect of drip irrigation and mulching on tomato yield, 25 (1994) 179

Wheat (Triticum aestivum)

The dependence of irrigation requirements on watertable depth in drained lands, 1 (1977) 191

Seasonal water use by winter wheat grown under shallow watertable conditions, 1 (1978) 263

Water potential and turgor pressure as a selection basis for wind-grown winter wheat, 1 (1978) 343

Evaluation of water management systems in a tubewell irrigated farm, 2 (1979) 67

Leaching requirement for salinity control, I. Wheat, sorghum, and lettuce, 2 (1979) 177

Yield, water use and root distribution of wheat as affected by pre-sowing and post-sowing irrigation, 2 (1980) 289

Decision models for optimal cropping patterns in irrigations based on crop water production functions, 3 (1980) 65

Water use and wheat yields in northern India under different irrigation regimes, 3 (1980) 107

Wheat root distribution, water extraction pattern and grain yield as influenced by time and rate of irrigation, 3 (1980) 115

Yield response of a semi-dwarf wheat variety to irrigation on a calcareous brown flood plain soil of Bangladesh, 3 (1981) 217

Wheat yield estimation in northwest Iran, 3 (1981) 291

Water use and water-use efficiency of wheat and barley in relation to seeding dates, levels of irrigation and nitrogen fertilization, 3 (1981) 305

Effect of field levelling quality on irrigation efficiency and crop yield, 4 (1981) 457

Effect of small irrigation amounts on the yield of wheat, 6 (1983) 31

Wheat root growth, grain yield and water uptake as influenced by soil water regime and depth of nitrogen placement in a loamy sand soil, 6 (1983) 365

Farm management and the function of field crop root systems, 7 (1983) 115

Drought resistance and wheat breeding, 7 (1983) 181

Strategies for crop improvement for droughtprone regions, 7 (1983) 281

Drought detection and quantification by reflectance and thermal responses, 7 (1983) 303

Effect of drainage conditions on winter wheat production, 7 (1983) 425

Crop water requirements for rainfed and irrigated wheat in China and Korea, 8 (1984) 411

Assessment of the SPAW model for semi-arid growing conditions with minimal local calibration, 10 (1985) 31

Response of wheat to irrigation with small amounts of water applied in various ways, 10 (1985) 357

Water production functions for wheat under different environmental conditions, 11 (1986) 319

Water use and yield response of wheat to irrigation and nitrogen on an alluvial soil in North India, 12 (1987) 311

Modelling of yield of winter wheat as a function of soil water availability, 12 (1987) 323

Evapotranspiration, pan evaporation and soil water relationships for wheat (*Triticum aestivum*), 13 (1988) 65

Effect of watertable depth and waterlogging on crop yield, 14 (1988) 29

Effect of watertable on yield and root depth of winter wheat in the French West Central Atlantic Marshlands, 14 (1988) 35

Effect of gypsum and sodic irrigation water on soil and crop yields in a rice-wheat rotation, 16 (1989) 53

Prediction of sustained sodic irrigation effects on soil sodium saturation and crop yields, 16 (1989) 217

Rainwater harvesting for the management of agricultural droughts in the foothills of northern India, 16 (1989) 309 Canopy temperature as an indicator of differential water use and yield performance among wheat cultivars, 18 (1990) 35

Effect of irrigation scheduling on growth, yield and evapotranspiration of wheat in sodic soils, 18 (1990) 267

Water use of a winter wheat cultivar (Triticum aestivum), 19 (1991) 77

Irrigation of wheat with saline drainage water on a sandy loam soil, 19 (1991) 223

Development of soil salinity during germination and early seedling growth and its effect on several crops, 20 (1991) 17

Effect of sodic irrigation and gypsum on the reclamation of sodic soil and growth of rice and wheat plants, 20 (1991) 163

Supplementary irrigation for sequential cropping in the Ethiopian highland vertisols using broadbed and furrow land management system, 20 (1991) 173

Response of wheat to irrigation with saline water varying in anionic constituents and phosphorus application, 20 (1991) 223

Effect of high salinity and SAR waters on salinization, sodication and yields of pearl-millet and wheat, 21 (1992) 93

Statistical analyses of soil variability: effects of variability on level-basin irrigation of wheat, 21 (1992) 177

Econometric consideration for reuse of drainage effluent in wheat production, 22 (1992) 249

Effect of continuous irrigation with sodic and saline-sodic waters on soil properties and crop yields under cotton-wheat rotation in northwestern India, 22 (1992) 345

The water-use efficiency of winter wheat and maize on a salt-affected soil in the Huang Huai Hai river plain of China, 23 (1993) 67

Evapotranspiration from wheat under a semi-arid climate and a shallow watertable, 23 (1993) 91

Conjunctive use of saline and non-saline waters, I. Response of wheat to initial salinity profiles and salinisation patterns, 23 (1993) 125

Conjunctive use of saline and non-saline waters, II. Field comparisons of cyclic uses and mixing for wheat, 23 (1993) 139

Conjunctive use of saline and non-saline waters, III. Validation and applications of a transient model for wheat, 23 (1993) 149

Effect of saline water on soil salinity and on water stress, growth, and yield of wheat and potatoes, 23 (1993) 247

Soil water and ET estimates for a wide range of rainfed and irrigated conditions, 24 (1993) 147 Saline water management for optimum crop production, 24 (1993) 189

Dynamics of water use in a dry mediterranean environment, I. Soil Evaporation little affected by presence of plant canopy, 24 (1993) 205

8. Land use and farm management

8.1. Land use

Agroforestry

Pasture evapotranspiration under varying tree planting density in an agroforestry experiment, 15 (1988) 87

Annual pasture

Dynamics of water use under annual legume pastures in a semi-arid mediterranean environment, 22 (1992) 291

Water use of agricultural and native plants in a Western Australian wheatbelt catchment, 22 (1992) 357

Arable land

An integrated model-approach to the effect of water management on crop yield, 1 (1976) 3

Measurement and prediction of evaporation from forested and agricultural catchments, 8 (1984)

Groundwater recharge in Schleswig-Holstein (West-Germany), 14 (1988) 339

Solute input into groundwater from sandy soils under arable land and coniferous forest: determination of area-representative mean values of concentration, 15 (1989) 265

Bog reserve

Quantification of local ecological effect in regional hydrologic modelling of bog reserves and surrounding agricultural lands, 25 (1994) 45

Forest (tree)

Measurement and prediction of evaporation from forested and agricultural catchments, 8 (1984) 1

Evapotranspiration from a eucalyptus community, 8 (1984) 41

Determination of the evapotranspiration of E. Regnans forested catchments using hydrological measurements, 8 (1984) 57

Modelling evapotranspiration: an approach to heterogeneous communities, 8 (1984) 203 Water use by isolated trees, 8 (1984) 223

A model of canopy drying, 8 (1984) 243

Nutrient inputs and outputs in a forested and grassland catchment at Plynlimon, mid Wales, 9 (1984) 177

Groundwater recharge in Schleswig-Holstein (West-Germany), 14 (1988) 339

Modelling forest water consumption in the Netherlands, 14 (1988) 413

Solute input into groundwater from sandy soils under arable land and coniferous forest: determination of area-representative mean values of concentration, 15 (1989) 265

Simulation of evapotranspiration by trees, 19 (1991) 205

Hydrologic and salinity changes associated with tree plantations in a saline agricultural catchment in southwestern Australia, 22 (1992) 307

Grassland

An integrated model-approach to the effect of water management on crop yield, 1 (1976) 3

Diffusion-based soil water simulation for native grassland, 9 (1984) 47

Nutrient inputs and outputs in a forested and grassland catchment at Plynlimon, mid Wales, 9 (1984) 177

Evapotranspiration and grassland yield, 10 (1985)

Groundwater recharge in Schleswig-Holstein (West-Germany), 14 (1988) 339

Pasture evapotranspiration under varying tree planting density in an agroforestry experiment, 15 (1988) 87

Estimating the value of flood alleviation on agricultural grassland, 15 (1988) 141

A model for investment appraisal of grassland drainage schemes on farms in the U.K., 18 (1990) 101

Effect of retention of run-off water and grazing on soil and on vegetation of a temperature humid grassland, 23 (1993) 233

Land use

The influence of plant communities upon the hydrology of catchments, 4 (1981) 19

Predicting stream salinity changes in southwestern Australia, 4 (1981) 227

Dryland cropping strategies for efficient water-use to control saline seeps in the Northern Great Plains, U.S.A., 4 (1981) 295

Management of soil water budgets of recharge areas for control of salinity in south-western Australia, 4 (1981) 313 Seasonal variations in nitrate leaching in structured clay soils under mixed land use, 7 (1983) 391

Measurement and prediction of evaporation from forested and agricultural catchments, 8 (1984)

Evapotranspiration of four major agricultural plant communities in the south-west of Western Australia measured with large ventilated chambers, 8 (1984) 191

Nutrient inputs and outputs in a forested and grassland catchment at Plynlimon, mid Wales, 9 (1984) 177

Dissolved oxygen, total organic carbon and temperature relationships in southeastern U.S. coastal plain watersheds, 9 (1985) 313

Groundwater recharge in Schleswig-Holstein (West-Germany), 14 (1988) 339

Solute input into groundwater from sandy soils under arable land and coniferous forest: determination of area-representative mean values of concentration, 15 (1989) 265

Land use changes and inputs of nitrogen to Loch Leven, Scotland: a desk study, 16 (1989) 119

Variability of soil water deficiencies for perennial forages in the Canadian prairie region, 20 (1991) 87

Computing the water balance of a small agricultural catchment in southern England by consideration of different land-use types, I. Land classification using remotely-sensed imagery, 21 (1992) 145

Computing the water balance of a small agricultural catchment in southern England by consideration of different land-use types, II. Evaporative losses from different vegetation types, 21 (1992) 155

Shrubs

Water use of agricultural and native plants in a Western Australian wheatbelt catchment, 22 (1992) 357

8.2. Farm management

Cropping pattern

Strategies for agricultural development in the Fayoum area, Egypt, 9 (1985) 287

Chance-constrained optimal windmill irrigation system design, 12 (1987) 279

Rainfall retention probabilities computed for different cropping-tillage systems, 15 (1988) 61 Issues in irrigation, 22 (1992) 3

Dryland farming

Water use, water-use efficiency and yield of dryland chickpea as influenced by P fertilization, stored soil water and crop season rainfall, 2 (1980) 299

Dryland management for salinity control, 4 (1981)

Soil management for semi-arid regions, 7 (1983)

Farm management and the function of field crop root systems, 7 (1983) 115

Principles of water management under drought conditions, 7 (1983) 143

Minimal irrigation on small agricultural watersheds with red soils in the semi-arid tropics of Andhra Pradesh, India, 16 (1989) 279

Dynamics of water use under annual legume pastures in a semi-arid mediterranean environment, 22 (1992) 291

Water use of agricultural and native plants in a Western Australian wheatbelt catchment, 22 (1992) 357

Fallow

Runoff and soil loss from an oxisol in southeastern Nigeria under various management practices, 5 (1982) 193

Prospects of soil moisture conservation by fallowing in areas of medium agricultural potential in smallholder farming, 14 (1988) 265

Farm management

The role of adapted farming in the solution of drainage problems on basin clay soils, 2 (1980) 257

Saline seep development and control in the North American Great Plains — hydrogeological aspects, 4 (1981) 115

Dryland cropping strategies for efficient water-use to control saline seeps in the Northern Great Plains, U.S.A., 4 (1981) 295

Dissolved inorganic nitrogen and phosphate concentration in discharge from two agricultural catchments in eastern Ontario, 5 (1982) 29

Farm management and the function of field crop root systems, 7 (1983) 115

Effects of catchment management on runoff, water quality and yield potential from vertisols, 12 (1986) 1

The French Programme of Drainage Reference Areas. Methodology and first results, 14 (1988) 53

Drainage and crop production system on intensive dairy farms in western France, 14 (1988) 61 Economic feasibility of agricultural management practices for reducing sedimentation in a water supply lake, 19 (1991) 361

Intercropping

Resource use in intercropping systems, 17 (1990) 215

The relative importance of competition for water and for light in intercropping of sugar cane with maize, 17 (1990) 233

The partitioning of light and water in drip irrigated plant cane with a maize intercrop, 17 (1990) 235

Response of selected legume companion crops to irrigation frequencies, 17 (1990) 257

Effect of water regime on yield of drip irrigated first ratoon cane intercropped with maize and groundnut, 22 (1992) 281

Mulch

Effect of vertical mulch on moisture conservation and yield of sorghum in vertisols, 1 (1978) 333

Sugarcane response to irrigation and straw mulch in a subtropical region, 3 (1980) 35

Runoff and soil loss from an oxisol in southeastern Nigeria under various management practices, 5 (1982) 193

Effect of water conservation on the yield of upland crops in the humid tropics, 14 (1988) 277

Irrigation scheduling and cantaloupe yield model for the Jordan Valley, 15 (1988) 177

Effect of drip irrigation and mulching on tomato yield, 25 (1994) 179

Nitrogen fertilization

Water use and wheat yields in northern India under different irrigation regimes, 3 (1980) 107

Evapotranspiration relationship with pan evaporation and evapotranspiration ratio of corn under different nitrogen levels and moisture regimes, 3 (1981) 227

Water use and water-use efficiency of wheat and barley in relation to seeding dates, levels of irrigation and nitrogen fertilization, 3 (1981) 305

Influence of irrigation on the development and yield of potatoes, 5 (1982) 171

Wheat root growth, grain yield and water uptake as influenced by soil water regime and depth of nitrogen placement in a loamy sand soil, 6 (1983) 365

Evapotranspiration and grassland yield, 10 (1985)

Water production function of sorghum for northeast Brazil, 11 (1986) 169

Irrigation with brakish water under desert conditions, V. Nitrogen requirement of tomatoes (Lycopersicon esculentum Mill.) during germination under drip irrigation, 11 (1986) 313

Water use and yield response of wheat to irrigation and nitrogen on an alluvial soil in North India, 12 (1987) 311

Effect of soil matric potential and nitrogen on growth, yield, nutrient uptake and water use of banana, 16 (1989) 109

A statistical analysis of the effect of drainage conditions and nitrogen fertilizer on apple production, 16 (1989) 251

Water and fertilizer interrelations with irrigated maize, 18 (1990) 49

Effects of trickle irrigation on the growth and sunscald of bell peppers (Capsicum annuum L.) in southern Quebec, 19 (1991) 181

The effect of timing on the redistribution of water-applied nitrogen in a sandy soil, 20 (1992) 255

Nutrient film culture

Nutrient-film culture, 4 (1981) 471

Phosphate fertilization

Water use, water-use efficiency and yield of dryland chickpea as influenced by P fertilization, stored soil water and crop season rainfall, 2 (1980) 299

Irrigation scheduling effects on yield and phosphorus uptake of cowpea, 10 (1985) 343

Water and fertilizer interrelations with irrigated maize, 18 (1990) 49

Response of wheat to irrigation with saline water varying in anionic constituents and phosphorus application, 20 (1991) 223

Rainfed cropping

Optimization of rainfed tropical cropping in semidry areas: a case study, 16 (1989) 337

Hydrological analysis of farm reservoirs in rainfed rice areas, 17 (1990) 351

Agricultural water balance of Yunnan Province, PR China: agroclimatic zoning with a Geographical Information System, 21 (1992) 249

Strip cropping

Flood flow through tall vegetation, 18 (1990) 317 Strip cropping — development of guidelines for the selection of strip spacing, 20 (1991) 1

Soil conditioner

Water harvesting by wax-treated soil surfaces: progress, problems, and potential, 3 (1980) 125

Effect of superabsorbent polymers on survival and growth of crop seedlings, 20 (1991) 63

Use of an hydrophilic polymer to improve water storage and availability to crops grown in sand dunes, I. Corn irrigated by trickling, 23 (1993) 303

Use of an hydrophilic polymer to improve water storage and availability to crops grown in sand dunes, II. Cabbage irrigated by sprinkling with different water salinities, 23 (1993) 315

Soil management (tillage)

Field infiltration indices in the evaluation of tillage practices, 1 (1976) 79

Soil management for semi-arid regions, 7 (1983) 89

Effect of upland pasture improvement on nutrient release in flows from a 'natural' lysimeter and a field drain, 11 (1986) 231

The hydrological response of a silty clay loam following drainage treatment, 14 (1988) 125

Readjusting the water balance to combat dryland salting in southern Australia: changing the hydrology of a texture contrast soil by deep ripping, 14 (1988) 287

Rainfall retention probabilities computed for different cropping-tillage systems, 15 (1988) 61

Effects of moling and cultivation on soil-water and runoff from a drained clay soil, 23 (1993) 161

9. Research methods

Finite element method

Calculation of non-steady flow towards a drain in saturated-unsaturated soil by finite elements, 2 (1979) 37

Gis

Agricultural water balance of Yunnan Province, PR China: agroclimatic zoning with a Geographical Information System, 21 (1992) 249

Kriging

Spatial variation in soil and the role of kriging, 6 (1983) 111

Optimal sampling density of hydraulic conductivity for subsurface drainage in the Nile Delta, 20 (1992) 299

Application of geostatistics to characterize spatial variability of infiltration in furrow irrigation, 25 (1994) 153

Lysimetry

Design, construction and testing of a lysimeter for a study of evapotranspiration of different crops, 23 (1993) 183

Dynamics of water use in a dry mediterranean environment, II. A test of four evaporation models using microlysimetry under spring wheat, 24 (1993) 225

Meteorological recording

Tropicalisation of automatic weather stations and initial results for improved irrigation water management in Reunion Island, 17 (1990) 141

Microcomputer use

Microcomputer for on-line control and operation of closed-conduit irrigation systems: an economical assessment, 16 (1989) 137

Field verification of a microcomputer irrigation model, 21 (1992) 215

Monte Carlo simulation

A screening method to identify the probabilities of pesticide leaching, 25 (1994) 23

An expert system to determine the probability of pesticide leaching, 25 (1994) 57

Remote sensing

Infrared thermometry: a remote sensing technique for predicting yield in water-stressed cotton, 6 (1983) 385

Drought detection and quantification by reflectance and thermal responses, 7 (1983) 303

Remote monitoring of rangeland production, 7 (1983) 323

Estimation of evapotranspiration at one time-ofday using remotely sensed surface temperatures, 7 (1983) 341

Estimation of daily evapotranspiration from one time-of-day measurements, 7 (1983) 351

Infrared remote sensing for monitoring rainfall, 7 (1983) 363

Integrating passive microwave measurements with a soil moisture/heat flow model, 7 (1983) 379

Effects of drainage on crops and farm management, 14 (1988) 3

An application of remote sensing and soil water balance simulation models to determine the effect of groundwater extraction on crop evapotranspiration, 15 (1989) 315

Computing the water balance of a small agricultural catchment in southern England by consideration of different land-use types, I. Land classification using remotely-sensed imagery, 21 (1992) 145

Resistance network analogue

An electrical analogue to design subirrigation systems, 6 (1983) 321

Water losses through the bunds of irrigated rice fields interpreted through an analogue model, 11 (1986) 59

Sampling (soil investigation)

Cost effectiveness of soil investigations for pipe drainage projects, 18 (1990) 333

Optimal sampling density of hydraulic conductivity for subsurface drainage in the Nile Delta, 20 (1992) 299

Sampling number and design for measurements of infiltration rates into puddled rice fields, 21 (1992) 281

Scaling

Scaling soil microhydrologic properties of Lakeland and Konawa soils using similar media concepts, 6 (1983) 277

Stochastic approach of soil water flow through the use of scaling factors: measurement and simulation, 13 (1988) 249

Quantification of local ecological effect in regional hydrologic modelling of bog reserves and surrounding agricultural lands, 25 (1994)

Sensitivity analysis

A method for applying crop sensitivity factors in irrigation scheduling, 5 (1982) 335

Significance of soil survey for agrohydrological studies, 14 (1988) 195

Evaluation and improvement of hydrological concepts used in PAWN, 14 (1988) 219

Optimal volumetric and economic groundwater mining for the Arkansas Grand Prairie, 15 (1988) 1

Sensitivity of Penman estimates of evaporation to errors in input data, 15 (1989) 279

Some empirical relations for the prediction of soil evaporation, transpiration and root water uptake under field conditions, 16 (1989) 323

Sensitivity analysis of parameters of border irrigation models, 18 (1990) 277 Sensitivity of agricultural drainage systems to changes in climatic inputs, 21 (1992) 57

Modelling soil water status for irrigation scheduling in potatoes, I. Description and sensitivity analysis, 23 (1993) 329

Modelling soil water status for irrigation scheduling in potatoes, II. Validation, 23 (1993) 343

Tensiometry

- A system for automatically measuring and recording soil water potential and rainfall, 3 (1980) 135
- A method for improving cheaply the time response of pressure-transducer tensiometer systems, 5 (1982) 285
- A dielectric tensiometer (Technical Note), 13 (1988) 411
- Soil matric potential sensor measurements in real-time irrigation scheduling, 16 (1989) 173

10. Models

10.1. Combined models

Drainage-subirrigation

A simple flow resistance model for the management of drainage/sub-irrigation systems, 21 (1992) 67

Irrigation-drainage relationship

An empirical model of the relationship between irrigation and the volume of water collected in subsurface drains, 16 (1989) 293

Modeled crop water use and soil water drainage, 19 (1991) 117

Soilwater-plant growth

An integrated model-approach to the effect of water management on crop yield, 1 (1976) 3

Evaluation of simplified water-crop yield models, 2 (1979) 95

Wheat yield estimation in northwest Iran, 3 (1981) 291

Predicting the effects of drainage systems on corn yields, 5 (1982) 127

Influence of irrigation on the development and yield of potatoes, 5 (1982) 171

Using a crop growth simulation model for evaluating irrigation practices, 5 (1982) 253

Obtaining soil physical field data for simulating soil moisture regimes and associated potato growth, 5 (1982) 319

Strategies for crop improvement for droughtprone regions, 7 (1983) 281

Effect of drainage conditions on winter wheat production, 7 (1983) 425

Crop water requirements for rainfed and irrigated wheat in China and Korea, 8 (1984) 411

Diffusion-based soil water simulation for native grassland, 9 (1984) 47

Evapotranspiration and grassland yield, 10 (1985)

Spatial variability of rainfall and yield of maize in a semi-arid region, 10 (1985) 13

Assessment of the SPAW model for semi-arid growing conditions with minimal local calibration, 10 (1985) 31

Modelling of yield of winter wheat as a function of soil water availability, 12 (1987) 323

Optimum sorghum planting dates in western Sudan by simulated water budgets, 13 (1988) 33

Improving irrigation management by modelling the irrigation schedule, 13 (1988) 113

Modelling and simulation in hydrologic systems related to agricultural development: state of the art, 13 (1988) 235

Effects of drainage on crops and farm management, 14 (1988) 3

Prediction of irrigation scheduling with the numerical model SWATRE, 14 (1988) 299

Rainfall probability forecasts used to manage a subdrainage-subirrigation system for watertable control, 15 (1988) 47

Irrigation scheduling and cantaloupe yield model for the Jordan Valley, 15 (1988) 177

Surface and subsurface drainage simulations for a claypan soil, 15 (1989) 211

Modelling the effects of tied-ridging on water conservation and crop yields, 16 (1989) 87

Simulation of controlled drainage in open-ditch drainage systems, 18 (1990) 301

Modeled crop water use and soil water drainage, 19 (1991) 117

Application of DRAINMOD under semi-arid conditions, 24 (1993) 63

Observations and modeling of interactions between barley yield and evapotranspiration in the subarctic, 25 (1994) 109

10.2. Irrigation models

Border irrigation

Derivation of shape factors for border irrigation advance, 2 (1980) 271

Evaluation of infiltration measurements for border irrigation, 3 (1981) 251

Evaluating infiltration for border irrigation models, 5 (1982) 159

Solution of the kinematic-wave equations for border irrigation, 9 (1984) 127

Performance irrigation parameters and their relationship to surface-irrigation design variables and yield, 10 (1985) 159

A quasi-steady state integral model for closed-end border irrigation, 11 (1986) 39

Interrelationships of performance parameters for irrigation borders, 12 (1987) 221

An analytical closed border irrigation model, I. Theory, 15 (1989) 223

An analytical closed border irrigation model, II. Experimental verification, 15 (1989) 243

Sensitivity analysis of parameters of border irrigation models, 18 (1990) 277

Effects of recession criteria on prediction of recession times in border irrigation models, 21 (1992) 167

Effect of flow fluctuations on free draining, sloping furrow and border irrigation systems, 24 (1993) 299

Development of a regression-based model of border irrigation on cracking soils, 25 (1994) 167

Furrow irrigation

Comparison and selection of furrow irrigation models, 9 (1984) 105

Performance irrigation parameters and their relationship to surface-irrigation design variables and yield, 10 (1985) 159

A physically based infiltration model for furrow irrigation, 23 (1993) 271

Estimating furrow infiltration, 24 (1993) 281

Effect of flow fluctuations on free draining, sloping furrow and border irrigation systems, 24 (1993) 299

Application of geostatistics to characterize spatial variability of infiltration in furrow irrigation, 25 (1994) 153

Irrigation regime

A model for the optimal operation of an irrigation system, 5 (1982) 241

Using a crop growth simulation model for evaluating irrigation practices, 5 (1982) 253

Choosing optimal design depth for surface irrigation systems, 6 (1983) 335

Crop water requirements for rainfed and irrigated wheat in China and Korea, 8 (1984) 411

Simulation of soil moisture profiles for scheduling of irrigations, 10 (1985) 175

Soil-water dynamics and optimum operating regime in trickle-irrigated fields, 13 (1988) 127

Irrigation scheduling under a limited water supply, 15 (1988) 165

Irrigation scheduling and cantaloupe yield model for the Jordan Valley, 15 (1988) 177

Impact of varying water supply on input use and yields of tank-irrigated rice, 15 (1989) 347

Dynamic irrigation scheduling with stochastic rainfall, 19 (1991) 253

Real-time adaptive irrigation scheduling under a limited water supply, 20 (1992) 267

Field verification of a microcomputer irrigation model, 21 (1992) 215

Evaluating three cotton simulation models under different irrigation regimes, 22 (1992) 391

Modelling soil water status for irrigation scheduling in potatoes, I. Description and sensitivity analysis, 23 (1993) 329

Modelling soil water status for irrigation scheduling in potatoes, II. Validation, 23 (1993) 343

Irrigation water distribution

A model for optimal allocation of canal water based on crop production functions, 2 (1979)

Planning of irrigation distribution and application systems by mixed-integer linear programming, 10 (1985) 265

Optimal operation schedule of irrigation distribution systems, 11 (1986) 23

Variable-time model for equitable irrigation water distribution, 17 (1990) 367

Mapping of irrigation need based on computerized soil and climatic data, 17 (1990) 391

Computerized scheduling for irrigation management and pumping operations in the watercourse command, 18 (1990) 1

A model to evaluate intensive vs. extensive irrigation practices for irrigated rice production system in Bangladesh, 20 (1991) 233

Modelling irrigation deliveries for tertiary units in large irrigation systems, 21 (1992) 197

The effect of allocation and scheduling rules on equity and productivity in irrigation systems, 21 (1992) 297

The effect of allocation schedules on the performance of irrigation systems with different levels of spatial diversity and temporal variability, 23 (1993) 213

Irrigation water demand

Modelling derived demand for irrigation water, 13 (1988) 403

Irrigation water reservoir

The influence of stream salinity on reservoir water quality, 4 (1981) 255

A regional approach to salinity management in river basins. A case study in southern Iran, 19 (1991) 27

On-farm irrigation planning

Computer model for on-farm irrigation system planning 24 (1993) 239

Pump irrigation

PUMPMOD: a simulation model for multipump rice irrigation systems, 15 (1989) 333

Simulation model use for analyzing decision variables in multipump rice irrigation system operation, 17 (1990) 339

10.3. Drainage models

Drainage design

A model for the design of drainage in flat agricultural lands, 5 (1982) 95

Watertable discharge

A simple model for flow on hillslopes, 14 (1988) 153

Drainage hydrology in the marshlands of western France, 14 (1988) 175

Testing of a field scale drainage model on subsurface-drained farmlands, 20 (1991) 29

Modelling watertable movement in drained soils with depth-dependent hydraulic conductivity, 20 (1991) 101

Watertable behaviour in drained lands: effect of evapotranspiration from the water table, 20 (1992) 313

10.4. Groundwater and soilwater models

Groundwater flow

Role of solute-transport models in the analysis of groundwater salinity problems in agricultural areas, 4 (1981) 187

Description of a regional groundwater flow model SIMGRO and some applications, 14 (1988) 209

Irrigation, groundwater abstraction and stream flow depletion, 14 (1988) 345

Operational aspects of surface water management in relation to the hydrology of agricultural areas and nature reserves, 14 (1988) 377

Hydrological research and the design of a water management system for a peatland area with agriculture and nature in the land consolidation project Echtener and Groote Veenpolder, 14 (1988) 389

The impact of water management upon groundwater fluctuations in a disturbed bog relict, 14 (1988) 439

Groundwater management

Interactive computer graphics-based multiobjective decision-making for regional groundwater management, 11 (1986) 91

Optimal volumetric and economic groundwater mining for the Arkansas Grand Prairie, 15 (1988) 1

Decision support for irrigation system improvement in saline environment, 23 (1993) 285

Non-steady unsaturated saturated flow

Calculation of non-steady flow towards a drain in saturated-unsaturated soil by finite elements, 2 (1979) 37

Regional solute transport

River basin hydrosalinity modelling, 4 (1981) 207 Predicting stream salinity changes in southwestern Australia, 4 (1981) 227

Soilwater flow

Simulation of water flow in the soil under subsurface trickle irrigation with water uptake by roots, 3 (1981) 179

A heuristic model of soil water regimes in clay soils in the presence of mole drainage, 6 (1983) 191

Note on A.C. Armstrong's heuristic model of soil water regimes in clay soils in the presence of mole drainage (Comments), 9 (1984) 157

Transport of a degradable substance and its metabolites under drip irrigation, 12 (1987) 195

On the modelling of the infiltration process in arid zones for irrigation project purposes with the aid of the 'Système Hydrologique Européen' (SHE), 13 (1988) 195

Effect of swelling and shrinkage on the calculation of water balance and water transport in clay soils, 14 (1988) 185

Field validation of an empirical soil water model, 14 (1988) 317 Treatment of spatially variable groundwater levels in one-dimensional stochastic unsaturated water-flow modelling, 15 (1988) 19

A critical assessment of the role of measured hydraulic properties in the simulation of absorption, infiltration and redistribution of soil water, 15 (1988) 73

Long-term moisture control for soils with shallow groundwater table, 16 (1989) 75

Application of the model MACRO to water movement and salt leaching in drained and irrigated marsh soils, Marismas, Spain, 25 (1994) 71

Testing and comparison of three unsaturated soil water flow models, 25 (1994) 135

Soilwater uptake

Farm management and the function of field crop root systems, 7 (1983) 115

Some empirical relations for the prediction of soil evaporation, transpiration and root water uptake under field conditions, 16 (1989) 323

Conjunctive use of saline and non-saline waters, III. Validation and applications of a transient model for wheat, 23 (1993) 149

Solute transport

Convective transport of solutes by steady flows, I. General theory, 1 (1978) 201

Convective transport of solutes by steady flows, II. Specific flow problems, 1 (1978) 219

Transport of salts in soils and subsoils, 4 (1981) 35 Residence times of water and solutes within and

below the root zone, 4 (1981) 63

Analyses of solute distributions in deeply weathered soils, 4 (1981) 83

Salt and water transport in unsaturated soil for non-conservative systems, 8 (1984) 397

Transport of a degradable substance and its metabolites under drip irrigation, 12 (1987)

Forecasting the suitability of pumped groundwater for irrigation in the Nile Valley, 14 (1988) 525

Solute movement during intermittent water flow in a field soil and some implications for irrigation and fertilizer application, 20 (1991)

Conjunctive use of saline and non-saline waters, III. Validation and applications of a transient model for wheat, 23 (1993) 149

Field evaluation of desalinization models, 24 (1993) 1

Application of the model MACRO to water movement and salt leaching in drained and irrigated marsh soils, Marismas, Spain, 25 (1994) 71

Unsaturated saturated solute transport

Systems approach to an unsaturated-saturated groundwater quality model, including adsorption, decomposition and bypass, 10 (1985) 193

Calculating the quality of drainage water from non-homogeneous soil profiles with an extension to an unsaturated-saturated groundwater quality model including bypass flow, 10 (1985) 293

10.5. Other models

Canal flow

A dissipative finite element model for discontinuous unsteady flow in open channel, 13 (1988) 157

Transient hydraulic modelling for improved canal system operation, 18 (1990) 181

Catchment reservoir

A design-discharge calculation method based on the parallel use of reservoir models, 5 (1982) 205

Cropping pattern

A model for optimal allocation of canal water based on crop production functions, 2 (1979) 79

Decision models for optimal cropping patterns in irrigations based on crop water production functions, 3 (1980) 65

A nonlinear chance constrained model for irrigation planning, 18 (1990) 87

Modeled crop water use and soil water drainage, 19 (1991) 117

Economic

Economic evaluation of salinity, drainage and non-uniformity of infiltrated irrigation water, 10 (1985) 221

Modeled crop water use and soil water drainage, 19 (1991) 117

Erosion

Mathematic-statistical simulation of topsoil particle losses during heavy rainfall, 25 (1994) 121

Evaporation

Dynamics of water use in a dry mediterranean environment, II. A test of four evaporation models using microlysimetry under spring wheat, 24 (1993) 225

Evapotranspiration

Water use in lowland rice cultivation in Asia: a review of evapotranspiration, 3 (1980) 83

Crop water requirements for rainfed and irrigated grain corn in China, 6 (1983) 43

The development and proving of models of large scale evapotranspiration: an Australian study, 8 (1984) 305

Crop water requirements for rainfed and irrigated wheat in China and Korea, 8 (1984) 411

Daily potential evapotranspiration modelling, 13 (1988) 393

Forecasting of reference crop evapotranspiration, 24 (1993) 163

Optimization

Developments and possibilities of optimization models, 13 (1988) 329

Decision support for irrigation system improvement in saline environment, 23 (1993) 285

Plant environment

Potential for plant environment modification, 7 (1983) 73

Regional water management

Evaluation and improvement of hydrological concepts used in PAWN, 14 (1988) 219

Stream flow

Step-ahead state forecasting using streamflow observations, 13 (1988) 169

Role of hydrological forecasts and river flow modelling in rational agricultural water management in the perspective of a climate change — a case study of the Rivers Upper Nile and Niger, 13 (1988) 383

Water balance

Water balance under wheat modelled with limited soil data, 8 (1984) 291

Water harvesting

A linear regression model combined with a soil water balance model to design microcatchments for water harvesting in arid zones, 11 (1986) 187

An empirical approach for predicting runoff yield under desert conditions,

Water harvesting strategies in the semi-arid climate of southeastern Spain, 14 (1988) 253

AUTHOR INDEX

Agricultural Water Management, volumes 1-25



A

Abbott, C.L. and Ah Koon, P.D., Contrasting soil moisture environments beneath sugar cane drip irrigated during the day, and at night, 22 (1992) 271

Abd El Salam, N., see De Malach, Y., 16 (1989) 201

Abdel-Alim, M.Q., see El-Atfy, H.E., 19 (1991) 289

 Abdel-Dayem, S., see Hamdy, A., 24 (1993) 189
 Abderrahman, W., Water management plan for the Al-Hassa Irrigation and Drainage Project in Saudi Arabia, 13 (1988) 185

Abdul-Jabbar, A.S., Sammis, T.W., Lugg, D.G., Kallsen, C.E. and Smeal, D., Water use by alfalfa, maize, and barley as influenced by available soil water, 6 (1983) 351

Abdulmumin, S., see Nwadukwe, P.O., 16 (1989)

Abdulmumin, S. and Misari, S.M., Crop coefficients of some major crops of the Nigerian semi-arid tropics, 18 (1990) 159

Abeliovich, A., Avoiding ochre deposits in soil drainage pipes, 10 (1985) 327

Abo-Ghobar, H.M., Losses from low-pressure center-pivot irrigation systems in a desert climate as affected by nozzle height, 21 (1992)

Abrol, I.P., see Khosla, B.K., 2 (1979) 193

Abrol, I.P., see Dahiya, I.S., 3 (1980) 3

Abrol, I.P., see Chawla, K.L., 5 (1982) 41

Abrol, I.P., see Painuli, D.K., 11 (1986) 247 Abu-Zeid, M., see Hamdy, A., 24 (1993) 189

Aburime, S.O., see Steenhuis, T.S., 14 (1988) 137

Adams, P., Nutrient-film culture, 4 (1981) 471

Adamson, K.C., see Gilbert, R.G., 3 (1981) 159 Adar, E., see Silberbush, M., 23 (1993) 303

Adar, E., see Silberbush, M., 23 (1993) 315
Adiku, S.G.K., Renger, M. and Roth, C., A simple model for extrapolating the electrical conductivity data of gypsum containing soils from reference soil extract data, 21 (1992) 235

Adnan, A., see Al-Khafaf, S., 18 (1990) 63
Agarwal, M.C. and Goel, A.C., Effect of field levelling quality on irrigation efficiency and crop yield, 4 (1981) 457

Agnihotri, A.K., see Chauhan, C.P.S., 20 (1991)

Agnihotri, A.K., Kumbhare, P.S., Rao, K.V.G.K. and Sharma, D.P., Econometric consideration for reuse of drainage effluent in wheat production, 22 (1992) 249 Agnihotri, R.C., see Rama Mohan Rao, M.S., 1 (1978) 333

Agnihotri, Y., see Grewal, S.S., 16 (1989) 309

Ah Koon, P.D., see Bell, J.P., 17 (1990) 171 Ah Koon, P.D., see Hodnett, M.G., 17 (1990) 189

Ah Koon, P.D., Gregory, P.J. and Bell, J.P., Influence of drip irrigation emission rate on distribution and drainage of water beneath a sugar cane and a fallow plot, 17 (1990) 267

Ah Koon, P.D., see Abbott, C.L., 22 (1992) 271 Ahmad, S. and Heermann, D.F., Computer-

Ahmad, S. and Heermann, D.F., Computerized scheduling for irrigation management and pumping operations in the watercourse command, 18 (1990) 1

Ahmadi, M.Z., Field estimation of the spacing of parallel drainage ditches, 20 (1991) 203

Ahuja, L.R., see Sharpley, A.N., 15 (1988) 37 Aina, P.O., see Fapohunda, H.O., 9 (1984) 219

Airaksinen, H., see Astatke, A., 20 (1991) 173 Al-Amoud, A.I., see Mohammad, F.S., 24 (1993)

Al-Asadi, N.M., see Al-Khafaf, S., 18 (1990) 63 Al-Janabi, K., see Al-Khafaf, S., 15 (1989) 377

Al-Khafaf, S., Al-Janabi, K., Hussain, I.A., Manky, F.S. and Saliem, L.H., Maize root development under various levels of salinity and water distribution, 15 (1989) 377

Al-Khafaf, S., Sharhan, F.A., Wierenga, P.J. and Iyada, A.D., Some empirical relations for the prediction of soil evaporation, transpiration and root water uptake under field conditions, 16 (1989) 323

Al-Khafaf, S., Adnan, A. and Al-Asadi, N.M., Dynamics of root and shoot growth of barley under various levels of salinity and water stress, 18 (1990) 63

Al-Taie, M.T., see Eloubaidy, A.F., 24 (1993) 1 Alam, J., see Islam, T., 18 (1990) 173

Albertson, M.L. and Bouwer, H., Future of irrigation in balanced third world development, 21 (1992) 33

Alconada, M., Ansin, O.E., Lavado, R.S., Deregibus, V.A., Rubio, G. and Gutiérrez Boem, F.H., Effect of retention of run-off water and grazing on soil and on vegetation of a temperature humid grassland, 23 (1993) 233

Alemi, M.H., Distribution of water and salt in soil under trickle and pot irrigation regimes, 3 (1981) 195

Alexander, D.McE., see Groot Obbink, J., 1 (1977) 179

Alexander, W.L., see Bucks, D.A., 10 (1985) 61 Alexander, W.L., see Bucks, A., 10 (1985) 81

Alexander, W.L., see Bucks, D.A., 10 (1985) 95

Allee, C.P., see Phene, C.J., 16 (1989) 173Alonso Neto, F.B., see Sharma, P.N., 11 (1986) 169

Alves, W.J., see Hoffman, G.J., 7 (1983) 439 Alvino, A, see Pagliai, M., 16 (1989) 63 Amer, F., see Ragab, R.A., 11 (1986) 221

Amir, I., see Pleban, S., 3 (1981) 269

Anand Reddy, K., see Devender Reddy, M., 3 (1981) 227

Anastasiadou-Partheniou, L. and Terzidis, G., A dissipative finite element model for discontinuous unsteady flow in open channel, 13 (1988) 157

Andreu, L., Moreno, F., Narvis, N.J. and Vachaud, G., Application of the model MACRO to water movement and salt leaching in drained and irrigated marsh soils, Marismas, Spain, 25 (1994) 71

Angus, D.E. and Watts, P.J., Evapotranspiration — how good is the Bowen ratio method?, 8 (1984) 133

Anjaneyulu, B., Partially penetrating wells in unconfined aquifers, 20 (1991) 185

Ansin, O.E., see Alconada, M., 23 (1993) 233

Armstrong, A.C., A heuristic model of soil water regimes in clay soils in the presence of mole drainage, 6 (1983) 191

Armstrong, A.C. and Arrowsmith, R., Field evidence for a bi-porous soil water regime in clay soils, 11 (1986) 117

Armstrong, A.C., Rands, J.G. and Castle, D.A., Drainage benefits: watertable control, workability and crop yields, 14 (1988) 43

Armstrong, A.C., see Clark, A.M., 14 (1988) 113 Armstrong, A.C., see Dowle, K., 18 (1990) 101

Armstrong, A.C., Youngs, E.G. and Arrowsmith, R., Modelling watertable movement in drained soils with depth-dependent hydraulic conductivity, 20 (1991) 101

Armstrong, A.C., Arrowsmith, R. and Castle, D.A., Sensitivity of agricultural drainage systems to changes in climatic inputs, 21 (1992) 57

Arnason, J.T., see Govinden, N., 17 (1990) 233

Arnold, G.E. and Van Vuuren, W.E., Evaluation and improvement of hydrological concepts used in PAWN, 14 (1988) 219

Arora, P.A. and McTernan, W.F., An expert system to determine the probability of pesticide leaching, 25 (1994) 57

Arora, Y., see Nwadukwe, P.O., 16 (1989) 241 Arrowsmith, R., see Armstrong, A.C., 11 (1986) 117 Arrowsmith, R., see Armstrong, A.C., 20 (1991) 101

Arrowsmith, R., see Armstrong, A.C., 21 (1992) 57

Asare, D.K., Sammis, T.W., Assadian, H. and Fowler, J.L., Evaluating three cotton simulation models under different irrigation regimes, 22 (1992) 391

Asmussen, L.E., see Joyce, K., 9 (1985) 313 Assadian, H., see Asare, D.K., 22 (1992) 391

Astatke, A., Airaksinen, H. and Mohamed Saleem, M.A., Supplementary irrigation for sequential cropping in the Ethiopian highland vertisols using broadbed and furrow land management system, 20 (1991) 173

Aston, A.R., see Dunin, F.X., 8 (1984) 305 Attia, F.A.R., see Lennaerts, A.B.M., 14 (1988) 525

Aviram, C., see Pasternak, D., 11 (1986) 303 Awad, M., see Stillwater, R., 20 (1991) 135 Ayars, J.E., see Hutmacher, R.B., 19 (1991) 135 Ayars, J.E., Hutmacher, R.B., Vail, S.S. and

Ayars, J.E., Hutmacher, K.B., Vail, S.S. and Schoneman, R.A., Cotton response to nonuniform and varying depths of irrigation, 19 (1991) 151

Ayuso, J.L., see Giráldez, J.V., 14 (1988) 253 Azar, A.H., see Murty, V.V.N., 21 (1992) 13 Azoulai, A., see Pasternak, D., 12 (1986) 137

B

Bajwa, M.S. and Josan, A.S., Effect of gypsum and sodic irrigation water on soil and crop yields in a rice-wheat rotation, 16 (1989) 53

Bajwa, M.S. and Josan, A.S., Prediction of sustained sodic irrigation effects on soil sodium saturation and crop yields, 16 (1989) 217

Bajwa, M.S., see Singh, H., 20 (1991) 163

Bajwa, M.S., Choudhary, O.P. and Josan, A.S., Effect of continuous irrigation with sodic and saline-sodic waters on soil properties and crop yields under cotton-wheat rotation in northwestern India, 22 (1992) 345

Bajwa, M.S., see Sekhon, B.S., 24 (1993) 15
Bakr, H.M.A., Fathi, A.M. and Gheibeh, A.R.S.,
Evaluation of the parameters involved in Gardner's relation between unsaturated hydraulic conductivity and soil water matric suction, 2

Balabanis, P., see Vachaud, G., 13 (1988) 249

(1979)25

Balasubramanian, R. and Govindasamy, R., Ranking irrigation tanks for modernization, 20 (1991) 155

Baldwin, J., see Bichara, A.F., 9 (1985) 287

Bannink, M.H., see Hendricky, I.M.H., 14 (1988)

Bannink, M.H., see Hendrickx, J.M.H., 14 (1988) 195

Barbieri, G., Effect of irrigation and harvesting dates on the yield of spring-sown sugar-beet, 5 (1982) 345

Barendregt, A., see Schot, P.P., 14 (1988) 459

Barfield, B.J. and Norman, J.M., Potential for plant environment modification, 7 (1983) 73

Barr, A.G., see Singh, G., 23 (1993) 329

Barr, A.G., see Singh, G., 23 (1993) 343

Barrett, J.W.H. and Skogerboe, G.V., Crop production functions and the allocation and use of irrigation water, 3 (1980) 53

Barrington, S.F., see Hackwell, S.G., 20 (1991) 29 Bartle, G.A., see Farrington, P., 22 (1992) 357

Baruah, T.C., see Siyag, R.S., 6 (1983) 15

Bassett, D.L., see Omer, M.A., 13 (1988) 33

Bassett, D.L., see Stockle, C.O., 19 (1991) 167 Batchelor, C.H., see Gunston, H., 6 (1983) 65

Batchelor, C.H., see Tuley, P., 17 (1990) 1

Batchelor, C.H., Soopramanien, G.C., Bell, J.P., Nayamuth, R. and Hodnett, M.G., Importance of irrigation regime, dripline placement and row spacing in the drip irrigation of sugar cane, 17 (1990) 75

Batchelor, C.H., see Roberts, J., 17 (1990) 95 Batchelor, C.H., see Soopramanien, G.C., 17 (1990) 129

Batchelor, C.H., see Hodnett, M.G., 17 (1990)

Batchelor, C.H., see Wallace, J.S., 17 (1990) 235 Batchelor, C.H., see Soopramanien, G.C., 22 (1992) 281

Battikhi, A.M. and Hill, R.W., Irrigation scheduling and cantaloupe yield model for the Jordan Valley, 15 (1988) 177

Baxter, J.C. and Laitos, W.R., Water control and the maintenance imperative: evidence from Nepal, 15 (1988) 115

Bazza, M., Benmoumen, A., Madrane, A. and Messaoudi, M., Sugar cane consumptive use, experimental results in the case of Morocco, 17 (1990) 337

Belford, R.K., see Yunusa, I.A.M., 24 (1993) 205 Belford, R.K., see Yunusa, I.A.M., 24 (1993) 225 Bell, J.P., see White, R.E., 7 (1983) 391

Bell, J.P., see Batchelor, C.H., 17 (1990) 75

Bell, J.P., Wellings, S.R., Hodnett, M.G. and Ah Koon, P.D., Soil Water Status: a concept for characterising soil water conditions beneath a drip irrigated row crop, 17 (1990) 171 Bell, J.P., see Hodnett, M.G., 17 (1990) 189 Bell, J.P., see Ah Koon, P.D., 17 (1990) 267

Belmans, C., Dekker, L.W. and Bouma, J., Obtaining soil physical field data for simulating soil moisture regimes and associated potato growth, 5 (1982) 319

Belmans, C., see Farshi, A.A., 12 (1987) 323
Ben Harrath, A., Ledieu, J., Dautrebande, S. and Noirfalise, A., Evapotranspiration and grassland yield, 10 (1985) 1

Ben-Asher, J., see Goldberg, S.D., 1 (1976) 33 Ben-Asher, J., Trickle irrigation timing and its effect on plant and soil water status, 2 (1979)

Ben-Asher, J., see Boers, Th.M., 5 (1982) 145 Ben-Asher, J., see Boers, Th.M., 11 (1986) 187

Ben-Asher, J., see Boers, Th.M., 12 (1986) 21
 Ben-Asher, J. and Warrick, A.W., Effect of variations in soil properties and precipitation on

micro-catchment water balance, 12 (1987) 177 Ben-Asher, J., see Karnieli, A., 14 (1988) 243

Ben-Asher, J., Phene, C.J. and Kinarti, A., Canopy temperature to assess daily evapotranspiration and management of high frequency drip irrigation systems, 22 (1992) 379

Benedini, M., Developments and possibilities of optimization models, 13 (1988) 329

Benmoumen, A., see Bazza, M., 17 (1990) 337 Berengena, J., see Mateos, L., 19 (1991) 313

Beresford, J.D., see Greenwood, E.A.N., 25 (1994) 185

Berg, R.D., see Rasmussen, W.W., 11 (1986) 31 Bergatino, R.N., see Miller, M.R., 4 (1981) 115

Berger, A., see Garnier, E., 11 (1986) 145 Berlamont, J., see Wyseure, G., 5 (1982) 205 Bernard, R., see Hatfield, J.L., 8 (1984) 429

Berthelot, B., see Soopramanien, G.C., 17 (1990)

Berthelot, P.B. and Robertson, C.A., A comparative study of the financial and economic viability of drip and overhead irrigation of sugarcane in Mauritius, 17 (1990) 307

Bhardwaj, A. and Singh, R., Development of a portable rainfall simulator infiltrometer for infiltration, runoff and erosion studies, 22 (1992) 235

Bhaskara Reddy, G., Rami Reddy, S. and Sankara Reddi, G.H., Frequency and depth of irrigation for groundnut, 3 (1980) 45

Bhatnagar, V.K., see Chaudhary, T.N., 3 (1980) 115

Bhattacharya, A.K., see Panda, R.K., 12 (1987) 279

Bhuiyan, S.I., see Galang, A.L.A., 15 (1989) 333 Bhuiyan, S.I., see Galang, A.L.A., 17 (1990) 339

Bhuiyan, S.I., see Guerra, L.C., 17 (1990) 351

Bhuiyan, S.I., see Ghani, M.A., 20 (1991) 233 Bhushan, L.S., see Singh, G., 2 (1980) 299

Bhushan, L.S., see Singh, G., 3 (1980) 107

Bichara, A.F. and Baldwin, J., Strategies for agricultural development in the Fayoum area, Egypt, 9 (1985) 287

Bichara, A.F., Proposals for agricultural development of Wadi Dhuleil catchment, Jordan, 11 (1986) 207

Biddiscombe, E.F., see Greenwood, E.A.N., 22 (1992) 307

Biddiscombe, E.F., see Greenwood, E.A.N., 25 (1994) 185

Biere, A.W., see Kanemasu, E.T., 7 (1983) 157 Biere, A.W., see Lee, E.S., 19 (1991) 253

Biggar, J.W., see Nightingale, H.I., 19 (1991) 271

Bingham, F.T., see Rhoades, J.D., 16 (1989) 25 Biswas, M.R., see Rahman, S.M., 3 (1981) 217

Black, A.L., Brown, P.L. and Siddoway, F.H., Dryland cropping strategies for efficient wateruse to control saline seeps in the Northern Great Plains, U.S.A., 4 (1981) 295

Blackie, J.R., see Roberts, G., 9 (1984) 177 Blackie, J.R., see Roberts, G., 11 (1986) 231

Blackwell, J., see Freeman, B.M., 1 (1976) 21

Blackwell, P.S. and Elsworth, M.J., A system for automatically measuring and recording soil water potential and rainfall, 3 (1980) 135

Blankenburg, J. and Kuntze, H., The integration of wetlands into man-made landscapes of N.W. Germany, 14 (1988) 451

Blum, A., Genetic and physiological relationships in plant breeding for drought resistance, 7 (1983) 195

Boels, D., A method to predict changes in hydraulic conductivity caused by drainage plows and backfilling of trenches, 2 (1979) 11

Boers, Th.M. and Ben-Asher, J., A review of rainwater harvesting, 5 (1982) 145

Boers, Th.M., De Graaf, M., Feddes, R.A. and Ben-Asher, J., A linear regression model combined with a soil water balance model to design micro-catchments for water harvesting in arid zones, 11 (1986) 187

Boers, Th.M., Zondervan, K. and Ben-Asher, J., Micro-Catchment-Water-Harvesting (MCWH) for arid zone development, 12 (1986) 21

Bognár, N. and Tóth, L.M., Methods to determine the need for drainage in flat areas, 14 (1988)

Booker, D.R., see Schuelein, J.W., 7 (1983) 37

Booth, R.J. and Lightfoot, C.J., The reticulation of ethanol stillage through irrigation systems and its use for fertilisation of sugarcane in Zimbabwe, 17 (1990) 49

Bootsma, A., see De Jong, R., 20 (1991) 87

Borovic, I., see Pasternak, D., 9 (1984) 225

Borovic, I., see Pasternak, D., 10 (1985) 47 Borovic, I., see Pasternak, D., 10 (1985) 335

Borovic, I., see Pasternak, D., 11 (1986) 303

Borovic, I., see Pasternak, D., 11 (1986) 313

Borovic, I., see Pasternak, D., 12 (1986) 149

Borovic, I., see De Malach, Y., 16 (1989) 201

Bos, M.G., The use of long-throated flumes to measure flows in irrigation and drainage canals, 1 (1977) 111

Bosch, D.J., Eidman, V.R. and Klopper Oosthuizen, L., A review of methods for evaluating the economic efficiency of irrigation, 12 (1987) 231

Böttcher, J., see Strebbel, O., 15 (1989) 265

Bouma, J., Dekker, L.W. and Verlinden, H.L., Drainage and vertical hydraulic conductivity of some Dutch 'knik' clay soils, 1 (1976) 67

Bouma, J., Soil morphology and preferential flow along macropores, 3 (1981) 235

Bouma, J., see Belmans, C., 5 (1982) 319

Bouma, J., Use of soil survey data to select measurement techniques for hydraulic conductivity, 6 (1983) 177

Bouma, J., see Dekker, L.W., 9 (1984) 37

Bouma, J., see Wopereis, M.C.S., 21 (1992) 281

Boumans, J.H. and Mashali, A.M., Seepage from Lake Burullus into the reclaimed Mansour and Zawia polder area, 7 (1983) 411

Boumans, J.H. and Smedema, L.K., Derivation of cost-minimizing depth for lateral pipe drains, 12 (1986) 41

Boumans, J.H., Van Hoorn, J.W., Kruseman, G.P. and Tanwar, B.S., Watertable control, reuse and disposal of drainage water in Harvana, 14 (1988) 537

Bouwer, H., Water conservation, 14 (1988) 233 Bouwer, H., see Albertson, M.L., 21 (1992) 33

Bouwer, H., Irrigation and global water outlook, 25 (1994) 221

Bouzid, A., see Katerij, N., 21 (1992) 107

Bowler, D.G., see MacGregor, A.N., 5 (1981) 181 Boyer, J.S., Subcellular mechanisms of plant response to low water potential, 7 (1983) 239

Brandyk, T. and Romanowicz, R., Long-term moisture control for soils with shallow groundwater table, 16 (1989) 75

Brandyk, T., Leeds-Harrison, P.B. and Skapski, K., A simple flow resistance model for the management of drainage/sub-irrigation systems, 21 (1992) 67

Bregt, A.K., see Ten Berge, H.F.M., 6 (1983) 213
 Bremond, B., Caupenne, J.M. and Collas, Ph.,
 Drainage hydrology in the marshlands of western France, 14 (1988) 175

Bresler, E., Transport of salts in soils and subsoils, 4 (1981) 35

Bresler, E. and Green, R.E., Transport of a degradable substance and its metabolites under drip irrigation, 12 (1987) 195

Bronswijk, J.J.B., Effect of swelling and shrinkage on the calculation of water balance and water transport in clay soils, 14 (1988) 185

Broughton, R.S., see Gallichand, J., 20 (1992) 299
Brouwer, J. and Van de Graaff, R.H.M., Readjusting the water balance to combat dryland salting in southern Australia: changing the hydrology of a texture contrast soil by deep ripping, 14 (1988) 287

Brown, D., see Kerr, G., 24 (1993) 147 Brown, D.M., see Singh, G., 23 (1993) 329 Brown, D.M., see Singh, G., 23 (1993) 343

Brown, K.W., Turner, F.T., Thomas, J.C., Deuel, L.E. and Keener, M.E., Water balance of flooded rice paddies, 1 (1978) 277

Brown, P.L., see Miller, M.R., 4 (1981) 115 Brown, P.L., see Black, A.L., 4 (1981) 295

Bruce, R.R., see Hornsby, A.G., 6 (1983) 269

Brzesowsky, W.J. and Van Vilsteren, A.E.M., An economic evaluation of sugar cane production under different water supply systems in Thailand, 13 (1988) 83

Bucks, A., Nakayama, F.S., French, O.F., Rasnick,
 B.A. and Alexander, W.L., Irrigated guayule —
 plant growth and production, 10 (1985) 81

Bucks, D.A., Nakayama, F.S. and Gilbert, R.G., Trickle irrigation water quality and preventive maintenance, 2 (1979) 149

Bucks, D.A., see Gilbert, R.G., 3 (1981) 159
Bucks, D.A., Nakayama, F.S., French, O.F.,
Legard, W.W. and Alexander, W.L., Irrigated
guayule — evapotranspiration and plant water
stress, 10 (1985) 61

Bucks, D.A., Nakayama, F.S., French, O.F., Legard, W.W. and Alexander, W.L., Irrigated guayule — production and water use relationships, 10 (1985) 95

Bucks, D.A., see Miyamoto, S., 10 (1985) 205 Bucks, D.A., see Hunsaker, D.J., 19 (1991) 325 Bucks, D.A., see Hunsaker, D.J., 21 (1992) 177

Buller, O., Manges, H.L., Stone, L.R. and Williams, J.R., Modeled crop water use and soil water drainage, 19 (1991) 117 Buntsma, J.J., see Schouten, P.H., 14 (1988) 471 Burgess, T.M., see Webster, R., 6 (1983) 111 Burke, K.L., see Pepper, R.G., 17 (1990) 379

Burrough, P.A., Problems of superimposed effects in the statistical study of the spatial variation of soil, 6 (1983) 123

Burrough, P.A., see Ten Berge, H.F.M., 6 (1983) 213

Busch, J.R., see King, B.A., 24 (1993) 239Busoni, E., Kowalik, P. and Sanesi, G., Effect of drainage conditions on winter wheat production, 7 (1983) 425

C

Cahoon, J., Kranz, W., Klocke, N. and Young, L., Furrow irrigators response to in-season precipitation and geographic characteristics, 23 (1993) 41

Calder, I.R., Water use of eucalypts — a review with special reference to South India, 11 (1986) 333

Campbell, B.J., see Maheshwari, B.L., 13 (1988)

Carruthers, I., Economic and social perspectives on new irrigation technology, 17 (1990) 283

Carter, D.C. and Miller, S., Three years experience with an on-farm macro-catchment water harvesting system in Botswana, 19 (1991) 191

Cassel, D.K., see Hornsby, A.G., 6 (1983) 269 Cassel, D.K., see Rao, P.S.C., 6 (1983) 277

Castle, D.A., see Armstrong, A.C., 14 (1988) 43 Castle, D.A., see Armstrong, A.C., 21 (1992) 57

Caupenne, J.M., see Bremond, B., 14 (1988) 175 Cavalieri, A.J., see Jensen, S.D., 7 (1983) 223

Cavazza, L. and Rossi Pisa, P., Effect of watertable depth and waterlogging on crop yield, 14 (1988) 29

Cecconi, G., Step-ahead state forecasting using streamflow observations, 13 (1988) 169

Chander, S., see Rao, N.H., 13 (1988) 25

Chander, S., see Rao, N.H., 15 (1988) 165 Chander, S., see Rao, N.H., 20 (1992) 267

Chang, A.C., see El-Mowelhi, N., 15 (1988) 131

Changnon, S.A., Jr., Society's involvement in planned weather modification, 7 (1983) 15

Chanmeesri, N., see Turner, A.K., 8 (1984) 375 Chastel, J.M., Impact of irrigation on sugarcane-

based production systems, 17 (1990) 317 Chaturvedi, M.C., see Khepar, S.D., 2 (1979) 217 Chaudhary, T.N. and Bhatnagar, V.K., Wheat root distribution, water extraction pattern and grain yield as influenced by time and rate of irrigation, 3 (1980) 115

Chaudhary, T.N., see Sharma, B.R., 6 (1983) 365

Chaudhary, T.N., Response of wheat to irrigation with small amounts of water applied in various

ways, 10 (1985) 357

Chauhan, C.P.S., Singh, R.B., Minhas, P.S., Agnihotri, A.K. and Gupta, R.K., Response of wheat to irrigation with saline water varying in anionic constituents and phosphorus application, 20 (1991) 223

Chauhan, C.P.S., see Singh, R.B., 21 (1992) 93 Chauhan, C.P.S., see Naresh, R.K., 23 (1993) 139

Chauhan, H.S., see Nikam, P.J., 20 (1992) 313

Chauhan, H.S., see Singh, K.M., 20 (1992) 329 Chauhan, C.P.S., see Minhas, P.S., 25 (1994) 97

Chavez-Morales, J., see Holzapfel, E.A., 9 (1984) 105

Chavez-Morales, J., see Holzapfel, E.A., 10 (1985) 159

Chawla, K.L. and Abrol, I.P., Effect of gypsum fineness on the reclamation of sodic soils, 5 (1982) 41

Cherif, K., see Gharbi, A., 24 (1993) 299

Chieng, S.T., see Tyera, M.N., 10 (1985) 343

Chieng, S.T., see Gupta, G.P., 24 (1993) 63 Chin, L.T., see Levine, G., 1 (1976) 41

Choudhary, O.P., see Bajwa, M.S., 22 (1992) 345

Chour, V., Note on A.C. Armstrong's heuristic model of soil water regimes in clay soils in the presence of mole drainage (Comments), 9 (1984) 157

Clapaki, G., see Michelakis, N., 24 (1993) 119

Clarck, L.E., see Rosenow, D.T., 7 (1983) 207
Clark, A.M., Armstrong, A.C., Parkinson, R.J.
and Reid, I., Field drainage and land management, a comparison of four long term field

trials, 14 (1988) 113
Clarke, J.M. and Simpson, G.M., Leaf osmotic potential as an indicator of crop water deficit and irrigation need in rapeseed (*Brassica napus* L.), 1 (1978) 351

Clemmens, A.J., Evaluation of infiltration measurements for border irrigation, 3 (1981) 251

Clemmens, A.J., Evaluating infiltration for border irrigation models, 5 (1982) 159

Clemente, R.S., De Jong, R., Hayhoe, H.N., Reynolds, W.D. and Hares, M., Testing and comparison of three unsaturated soil water flow models, 25 (1994) 135

Clothier, B.E., see Scotter, D.R., 15 (1988) 73 Clothier, B.E., see Tillman, R.W., 20 (1991) 119 Clothier, B.E. and Green, S.R., Rootzone processes and the efficient use of irrigation water (Review), 25 (1994) 1

Clyma, W., see Reddy, J.M., 5 (1982) 295

Clyma, W., see Reddy, J.M., 6 (1983) 335

Cogels, O.G., Heterogeneity and representativity of sampling in the study of soil microstructure by the mercury intrusion method, 6 (1983) 203

Collas, Ph., see Bremond, B., 14 (1988) 175Combres, J.C. and Jacquemoud-Collet, J.P., IR-RICANE: a computer model for the daily

water stress of sugarcane plots, 17 (1990) 211
Constantz, J., Distillation irrigation: a low-energy process for coupling water purification and drip irrigation, 15 (1989) 253

Cooley, K.R., see Fink, D.H., 3 (1980) 125

Cooper, C.M. and Knight, S.S., Nutrient trapping efficiency of a small sediment detention reservoir, 18 (1990) 149

Cooper, J.D., see Wellings, S.R., 6 (1983) 243

Cooper, J.R. and Fouss, J.L., Rainfall probability forecasts used to manage a subdrainage-subirrigation system for watertable control, 15 (1988) 47

Coulson, S.A., Irrigation recording to improve water management, 17 (1990) 213

Coupal, R.H. and Wilson, P.N., Adopting waterconserving irrigation technology: the case of surge irrigation in Arizona, 18 (1990) 15

Crabtee, R.J., Yassin, A.A., Kargougou, I. and McNew, R.W., Effects of alternate-furrow irrigation: water conservation on the yields of two soybean cultivars, 10 (1985) 253

Croote, S.G., see Dennis, C.W., 1 (1977) 143 Culley, J.L.B., see Phillips, P.A., 5 (1982) 29

Cuttle, S.P. and Mason, D.J., A flow-proportional water sampler for use in conjunction with a V-notch weir in small catchment studies, 13 (1988) 93

Cuttle, S.P., Land use changes and inputs of nitrogen to Loch Leven, Scotland: a desk study, 16 (1989) 119

D

Dabeesing, D.N., see Wallace, J.S., 17 (1990) 235 Daghari, H., see Gharbi, A., 24 (1993) 299

Dahiya, I.S., Abrol, I.P. and Hajrasuliha, S., Modelling transport of reactive solutes during leaching saline-sodic soils rich in soluble carbonates, 3 (1980) 3 Dahiya, I.S., Malik, R.S. and Singh, M., Reclaiming a saline-sodic, sandy loam soil under rice production, 5 (1982) 61

Daniels, B.T. and McTernan, W.F., A screening method to identify the probabilities of pesticide leaching, 25 (1994) 23

Danon, A., see Pasternak, D., 12 (1986) 137

Das Gupta, A., see Paudyal, G.N., 18 (1990) 87

Datta, B. and Peralta, R.C., Interactive computer graphics-based multiobjective decision-making for regional groundwater management, 11 (1986) 91

Dauten, K., see Prato, T., 19 (1991) 361

Dautrebande, S., see Ben Harrath, A., 10 (1985)

Davidson, J.M., see Hornsby, A.G., 6 (1983) 269 Davis, K.R., see Nightingale, H.I., 11 (1986) 159

De Boodt, M., see Verplancke, H., 14 (1988) 277

De Datta, S.K., see Hundal, S.S., 8 (1984) 387

De Graaf, M., see Boers, Th.M., 11 (1986) 187De Gruijter, J.J., see Van der Sluijs, P., 10 (1985) 109

De Haan, W., see Smedema, L.K., 10 (1985) 283De Heus, M.J., see Ten Berge, H.F.M., 6 (1983) 213

De Jong, J.J., see Hilhorst, M.A., 13 (1988) 411

De Jong, R. and Hayhoe, H.N., Diffusion-based soil water simulation for native grassland, 9 (1984) 47

De Jong, R. and Zentner, R.P., Assessment of the SPAW model for semi-arid growing conditions with minimal local calibration, 10 (1985) 31

De Jong, R., Bootsma, A., Dumanski, J. and Samuel, K., Variability of soil water deficiencies for perennial forages in the Canadian prairie region, 20 (1991) 87

De Jong, R., see Clemente, R.S., 25 (1994) 135De Jong, S.J., see Lennaerts, A.B.M., 14 (1988) 525

De Malach, Y., see Pasternak, D., 9 (1984) 225

De Malach, Y., see Pasternak, D., 10 (1985) 47

De Malach, Y., see Pasternak, D., 10 (1985) 335

De Malach, Y., see Pasternak, D., 10 (1965) 333 De Malach, Y., see Pasternak, D., 11 (1986) 303

De Malach, Y., see Pasternak, D., 11 (1986) 313

De Malach, Y., see Pasternak, D., 12 (1986) 137

De Malach, Y., see Pasternak, D., 12 (1986) 149

De Malach, Y., Pasternak, D., Mendlinger, S., Borovic, I. and Abd El Salam, N., Irrigation with brackish water under desert conditions, VIII. further studies on Onion (Allium cepa L.) production with brackish water, 16 (1989) 201

De Malach, Y., see Silberbush, M., 23 (1993) 303 De Malach, Y., see Silberbush, M., 23 (1993) 315

De Malach, Y., see Pasternak, D., 24 (1993) 321

De Wijngaert, K., see Farshi, A.A., 12 (1987) 323
De Wilde, J.G.S., Productive capacity of trenching and trenchless machines when laying subsurface drains, 21 (1992) 45

Dedrick, A.R., see Rhoades, J.D., 16 (1989) 25

Deju, Z. and Jingwen, L., The water-use efficiency of winter wheat and maize on a salt-affected soil in the Huang Huai Hai river plain of China, 23 (1993) 67

Dekker, L.W., see Bouma, J., 1 (1976) 67

Dekker, L.W., see Belmans, C., 5 (1982) 319

Dekker, L.W. and Bouma, J., Nitrogen leaching during sprinkler irrigation of a Dutch clay soil, 9 (1984) 37

Dekker, L.W., see Hendrickx, J.M.H., 14 (1988) 195

Demetriou, J.D. and Nanou-Giannarou, A.I., Water conveyance in channels with semicircular cross sections, 13 (1988) 273

Denmead, O.T., Plant physiological methods for studying evapotranspiration: problems of telling the forest from the trees, 8 (1984) 167

Dennis, A.S., Augmentation of rainfall from summer cumulus clouds, 7 (1983) 3

Dennis, C.W. and Croote, S.G., The minimum size of permeable fill used with mole drainage, 1 (1977) 143

Dennis, C.W. and Grindley, J., Probability of waterlogging estimated from historical rainfall records, 6 (1983) 397

Deregibus, V.A., see Alconada, M., 23 (1993) 233 Deuel, L.E., see Brown, K.W., 1 (1978) 277

Devender Reddy, M., Krishnamurthy, I., Anand Reddy, K. and Venkatachari, A., Evapotranspiration relationship with pan evaporation and evapotranspiration ratio of corn under different nitrogen levels and moisture regimes, 3 (1981) 227

Dhruva Narayana, V.V., see Tyagi, N.K., 2 (1979) 67

Dhruva Narayana, V.V., Kalra, V.D. and Singh, O.P., Design of a farm layout for irrigation with limited discharges, 3 (1980) 143

Dhruva Narayana, V.V., see Tyagi, N.K., 5 (1982) 51

Dhruva Narayana, V.V., see Kamra, S.K., 11 (1986) 127

Dierickx, W. and Van der Molen, W.H., Effect of perforation shape and pattern on the performance of drain pipes, 4 (1981) 429

Dierickx, W. and Yüncüoğlu, H., Factors affecting the performance of drainage envelope materials in structurally unstable soils, 5 (1982) 215 Dierickx, W., see Voet, M., 19 (1991) 17

Dinar, A., Letey, J. and Knapp, K.C., Economic evaluation of salinity, drainage and non-uniformity of infiltrated irrigation water, 10 (1985) 221

Dinar, A., Knapp, K.C. and Letey, J., Irrigation water pricing policies to reduce and finance subsurface drainage disposal, 16 (1989) 155

Dinar, A., Rhoades, J.D., Nash, P. and Waggoner, B.L., Production functions relating crop yield, water quality and quantity, soil salinity and drainage volume, 19 (1991) 51

Dirksen, C., see Hoffman, G.J., 1 (1978) 233

Dirksen, C., Oster, J.D. and Raats, P.A.C., Water and salt transport, water uptake, and leaf water potentials during regular and suspended high frequency irrigation of citrus, 2 (1979) 241

Diz, J., see Mateos, L., 19 (1991) 313

Dodi, A., see Karnieli, A., 14 (1988) 243

Dodsworth, G.H., Nixon, D.J. and Sweet, C.P.M., An assessment of drip irrigation of sugar cane on poorly structured soils in Swaziland, 17 (1990) 325

Dolman, A.J. and Nonhebel, S., Modelling forest water consumption in the Netherlands, 14

(1988) 413

Doneva, E., see Shospky, N., 13 (1988) 307 Donovan, J.J., see Miller, M.R., 4 (1981) 115 Doty, C.W., see Parsons, J.E., 18 (1990) 301

Dowle, K. and Armstrong, A.C., A model for investment appraisal of grassland drainage schemes on farms in the U.K., 18 (1990) 101

Dubey, L.N., see Grewal, S.S., 16 (1989) 309 Dugas, W.A., Jr., see Jordan, W.R., 7 (1983) 281 Dumanski, J., see De Jong, R., 20 (1991) 87

Duncan, J.E., see Messina, M.G., 24 (1993) 265 Dunin, F.X., see Slabbers, P.J., 3 (1981) 291

 Dunin, F.X., see Slabbers, F.J., 3 (1981) 291
 Dunin, F.X. and Aston, A.R., The development and proving of models of large scale evapotranspiration: an Australian study, 8 (1984) 305

E

Eastham, J. and Rose, C.W., Pasture evapotranspiration under varying tree planting density in an agroforestry experiment, 15 (1988) 87
Edling, R.J., see Koo, J.W., 18 (1990) 243
Eidman, V.R., see Bosch, D.J., 12 (1987) 231
Eisenhauer, D.E., see Kranz, W.L., 22 (1992) 325

Eisenhauer, D.E., see Graterol, Y.E., 24 (1993) 133

El Messaoudi, M., Use of pan evaporation for estimating the total dose and programming the irrigation of sugarcane, 17 (1990) 209

El-Amir, S., see Helalia, A.M., 19 (1991) 43

El-Atfy, H.E., Abdel-Alim, M.Q. and Ritzema, H.P., A modified layout of the subsurface drainage system for rice areas in the Nile Delta, Egypt, 19 (1991) 289

El-Bershamgy, A., see El-Mowelhi, N., 15 (1988)

El-Mowelhi, N., El-Bershamgy, A., Hoffman, G.J. and Chang, A.C., Enhancement of crop yields from subsurface drains with various envelopes, 15 (1988) 131

El-Sayed Mahrous, S., see Katerij, N., 21 (1992) 107

Elliott, R.L., Harp, S.L., Grosz, G.D. and Kizer, M.A., Crop coefficients for peanut evapotranspiration, 15 (1988) 155

Ellis, R.D. and Lankford, B.A., The tolerance of sugarcane to water stress during its main development phases, 17 (1990) 117

Elmore, R.W., see Graterol, Y.E., 24 (1993) 133
 Eloubaidy, A.F., Hussain, S.M. and Al-Taie, M.T.,
 Field evaluation of desalinization models, 24 (1993) 1

Elsworth, M.J., see Blackwell, P.S., 3 (1980) 135 Entz, T., see Foroud, N., 21 (1992) 215

Erlich, M., On the modelling of the infiltration process in arid zones for irrigation project purposes with the aid of the 'Système Hydrologique Européen' (SHE), 13 (1988) 195

Evans, R.G., Spayd, S.E., Wample, R.L., Kroeger, M.W. and Mahan, M.O., Water use of Vitis vinifera grapes in Washington, 23 (1993) 109

F

Fapohunda, H.O., Aina, P.O. and Hossain, M.M., Water use-yield relations for cowpea and maize, 9 (1984) 219

Fapohunda, H.O. and Hossain, M.M., Water and fertilizer interrelations with irrigated maize, 18 (1990) 49

Farrar, S.L., see Wample, R.L., 7 (1983) 457

Farrington, P., Salama, R.B., Watson, G.D. and Bartle, G.A., Water use of agricultural and native plants in a Western Australian wheatbelt catchment, 22 (1992) 357

Farshi, A.A., Feyen, J., Belmans, C. and De Wijngaert, K., Modelling of yield of winter wheat as a function of soil water availability, 12 (1987) 323

Fathi, A.M., see Bakr, H.M.A., 2 (1979) 25

Fayinke, T., see Hendrickx, J.M.H., 11 (1986) 75 Feddes, R.A. and Van Wijk, A.L.M., An inte-

Feddes, R.A. and Van Wijk, A.L.M., An integrated model-approach to the effect of water management on crop yield, 1 (1976) 3

Feddes, R.A., see Zaradny, H., 2 (1979) 37

Feddes, R.A., see Boers, Th.M., 11 (1986) 187

Feddes, R.A., Modelling and simulation in hydrologic systems related to agricultural development: state of the art, 13 (1988) 235

Feddes, R.A., Effects of drainage on crops and farm management, 14 (1988) 3

Fereres, E., see Mateos, L., 19 (1991) 313

Ferguson, J.A., see Gilmour, J.T., 1 (1978) 253

Feyen, J., see Wyseure, G., 5 (1982) 205

Feyen, J., see Farshi, A.A., 12 (1987) 323

Feyen, J., see Van Aelst, P., 13 (1988) 113

Field, M., The Meteorological Office Rainfall and Evaporation Calculation System — MORECS, 6 (1983) 297

Fink, D.H., Frasier, G.W. and Cooley, K.R., Water harvesting by wax-treated soil surfaces: progress, problems, and potential, 3 (1980) 125 Flinn, J.C., see Palanisami, K., 15 (1989) 347

Fonteh, M.F. and Podmore, T., A physically based infiltration model for furrow irrigation, 23 (1993) 271

Fonteh, M.F. and Podmore, T., Application of geostatistics to characterize spatial variability of infiltration in furrow irrigation, 25 (1994) 153

Fornstrom, K.J., see Kerr, G., 24 (1993) 147

Foroud, N., Hobbs, E.H., Riewe, R. and Entz, T., Field verification of a microcomputer irrigation model, 21 (1992) 215

Fouss, J.L., see Cooper, J.R., 15 (1988) 47

Fowler, J.L., see Asare, D.K., 22 (1992) 391

France, M., see Roberts, G., 21 (1992) 145 Frasier, G.W., see Fink, D.H., 3 (1980) 125

Freebairn, D.M., Wockner, G.H. and Silburn, D.M., Effects of catchment management on runoff, water quality and yield potential from vertisols, 12 (1986) 1

Freeman, B.M., Blackwell, J. and Garzoli, K.V., Irrigation frequency and total water application with trickle and furrow systems, 1 (1976)

Freeman, R., see Robinson, J.R.C., 21 (1992) 79 French, O.F., see Gilbert, R.G., 3 (1981) 159 French, O.F., see Bucks, D.A., 10 (1985) 61 French, O.F., see Bucks, A., 10 (1985) 81 French, O.F., see Bucks, D.A., 10 (1985) 95

Fry, K.E., see Pinter, P.J., Jr., 6 (1983) 385

Fry, R.K., Sinai, G.S. and Spoor, G., Machinery for installation of small diameter pipes at shallow depths, 9 (1984) 23

Fuller, K.D. and Moolman, J.H., The effect of timing on the redistribution of water-applied nitrogen in a sandy soil, 20 (1992) 255

G

Gajri, P.R. and Prihar, S.S., Effect of small irrigation amounts on the yield of wheat, 6 (1983) 31

Galang, A.L.A. and Bhuiyan, S.I., PUMPMOD: a simulation model for multipump rice irrigation systems, 15 (1989) 333

Galang, A.L.A. and Bhuiyan, S.I., Simulation model use for analyzing decision variables in multipump rice irrigation system operation, 17 (1990) 339

Gallagher, J.N., see Reid, J.B., 9 (1984) 193

Gallichand, J., Marcotte, D., Prasher, S.O. and Broughton, R.S., Optimal sampling density of hydraulic conductivity for subsurface drainage in the Nile Delta, 20 (1992) 299

García, A., see Giráldez, J.V., 14 (1988) 253

Gardner, C.M.K., A comparison of measured soil moisture deficits with those estimated by the Meteorological Office system, MORECS: a brief report, 6 (1983) 307

Gardner, H.R., see Gardner, W.R., 7 (1983) 143 Gardner, W.R. and Gardner, H.R., Principles of water management under drought conditions, 7 (1983) 143

Garnier, E., Berger, A. and Rambal, S., Water balance and pattern of soil water uptake in a peach orchard, 11 (1986) 145

Garratt, J.R., The measurement of evaporation by meteorological methods, 8 (1984) 99

Garton, J.E., see Stone, J.F., 5 (1982) 309

Garton, J.E., see Hodges, M.E., 16 (1989) 5

Garzoli, K.V., see Freeman, B.M., 1 (1976) 21

Genere, B., Tropicalisation of automatic weather stations and initial results for improved irrigation water management in Reunion Island, 17 (1990) 141

Geohring, L.D., see Steenhuis, T.S., 14 (1988) 137 George, R.J., Management of sandplain seeps in the wheatbelt of Western Australia, 19 (1991) 85

Ghali, G.A. and Svehlik, Z.J., The influence of sub-soil on the moisture regime in irrigated fields, 14 (1988) 307

Ghali, G.S. and Svehlik, Z.J., Soil-water dynamics and optimum operating regime in trickleirrigated fields, 13 (1988) 127

Ghani, M.A., Bhuiyan, S.I. and Hill, R.W., A model to evaluate intensive vs. extensive irrigation practices for irrigated rice production system in Bangladesh, 20 (1991) 233

Ghani, M.A., see Mondal, M.K., 23 (1993) 11

Gharbi, A., Daghari, H. and Cherif, K., Effect of flow fluctuations on free draining, sloping furrow and border irrigation systems, 24 (1993) 299

Gheibeh, A.R.S., see Bakr, H.M.A., 2 (1979) 25 Ghildyal, B.P., see Saini, B.C., 1 (1978) 263

Ghorbanzadeh, A., see Orlob, G.T., 4 (1981) 275

Gichuki, F.N., see Merkley, G.P., 18 (1990) 181 Gilbert, R.G., see Bucks, D.A., 2 (1979) 149

Gilbert, R.G., Nakayama, F.S., Bucks, D.A., French, O.F. and Adamson, K.C., Trickle irrigation: emitter clogging and other flow problems, 3 (1981) 159

Gill, K.S., see Sivakumar, M.V.K., 3 (1981) 279 Gilmour, J.T., Shirk, K.S., Ferguson, J.A. and

Griffis, C.L., A kinetic study of the CaCO₃ precipitation reaction, 1 (1978) 253

Giráldez, J.V., Ayuso, J.L., García, A., López, J.G. and Roldán, J., Water harvesting strategies in the semi-arid climate of southeastern Spain, 14 (1988) 253

Giresse, P., see Schmittner, K.-E., 25 (1994) 121 Gitonga, S., Small holder irrigated cane in the

Kano Plains of Kenya, 17 (1990) 301 Goel, A.C., see Agarwal, M.C., 4 (1981) 457

Goldberg, S.D., Ben-Asher, J. and Gornat, B., Soil and plant water status under sprinkling and trickling, 1 (1976) 33

Goldenberg, L.C., Change of characteristics of a granular aquifer in agricultural areas, 14 (1988) 329

Goldhamer, D.A., see Hanson, B.R., 12 (1986) 87 Gornat, B., see Goldberg, S.D., 1 (1976) 33

Goss, M.J., Harris, G.L. and Howse, K.R., Functioning of mole drains in a clay soil, 6 (1983) 27

Govind Reddy, M., Yogeswara Rao, Y., Subba Rao, K. and Ramaseshaiah, K., A preliminary study on scheduling irrigation with can evaporimeters (Short Communication), 6 (1983) 403 Govindasamy, R., see Balasubramanian, R., 20 (1991) 155

Govinden, N. and Arnason, J.T., The relative importance of competition for water and for light in intercropping of sugar cane with maize, 17 (1990) 233

Goyal, A.K., see Naresh, R.K., 23 (1993) 139

Grant, L.O., Utilization and assessment of operational weather modification programs for augmenting precipitation, 7 (1983) 23

Graterol, Y.E., Eisenhauer, D.E. and Elmore, R.W., Alternate-furrow irrigation for soybean production, 24 (1993) 133

Greacen, E.L. and Hignett, C.T., Water balance under wheat modelled with limited soil data, 8 (1984) 291

Green, R.E., see Bresler, E., 12 (1987) 195

Green, S.R., see Clothier, B.E., 25 (1994) 1

Greenwood, E.A.N., Milligan, A., Biddiscombe, E.F. and Rogers, A.L., Hydrologic and salinity changes associated with tree plantations in a saline agricultural catchment in southwestern Australia, 22 (1992) 307

Greenwood, E.A.N., Biddiscombe, E.F., Rogers, A.L., Beresford, J.D. and Watson, G.D., The influence of groundwater levels and salinity of a multi-specied tree plantation in the 500 mm rainfall region of south-western Australia, 25 (1994) 185

Gregory, P.J., Soil physics and irrigation: tapping the potential for drip, 17 (1990) 159

Gregory, P.J., see Ah Koon, P.D., 17 (1990) 267

Grewal, S.S., Mittal, S.P., Agnihotri, Y. and Dubey, L.N., Rainwater harvesting for the management of agricultural droughts in the foothills of northern India, 16 (1989) 309

Griffis, C.L., see Gilmour, J.T., 1 (1978) 253

Grimes, D.W., Yamada, H. and Hughes, S.W., Climate-normalized cotton leaf water potentials for irrigation scheduling, 12 (1987) 293

Grindley, J., see Dennis, C.W., 6 (1983) 397

Groot Obbink, J. and Alexander, D.McE., Observations of soil water and salt movement under drip and flood irrigation in an apple orchard, 1 (1977) 179

Grosz, G.D., see Elliott, R.L., 15 (1988) 155

Guacelli, F.S., see Lomax, K.M., 15 (1988) 197
Guerra, L.C., Watson, P.G. and Bhuiyan, S.I.,
Hydrological analysis of farm reservoirs in
rainfed rice areas, 17 (1990) 351

Guinn, G., see Pinter, P.J., Jr., 6 (1983) 385

Gulati, H.S. and Murty, V.V.N., A model for optimal allocation of canal water based on crop production functions, 2 (1979) 79

Gunston, H. and Batchelor, C.H., A comparison of the Priestley-Taylor and Penman methods for estimating reference crop evapotranspiration in tropical countries, 6 (1983) 65

Gupta, G.N., see Gupta, J.P., 6 (1983) 375

Gupta, G.P., Prasher, S.O., Chieng, S.T. and Mathur, I.N., Application of DRAINMOD under semi-arid conditions, 24 (1993) 63

Gupta, J.P. and Gupta, G.N., Effect of grass mulching on growth and yield of legumes, 6 (1983) 375

Gupta, R.K., see Khosla, B.K., 2 (1979) 193

Gupta, R.K., see Chauhan, C.P.S., 20 (1991) 223

Gupta, R.K., see Singh, R.B., 21 (1992) 93

Gupta, R.K., see Minhas, P.S., 23 (1993) 125

Gupta, R.K., see Naresh, R.K., 23 (1993) 139 Gupta, R.K., see Minhas, P.S., 23 (1993) 149

Gupta, R.K., see Minhas, P.S., 25 (1993) 149

Gupta, R.K., see Minhas, P.S., 25 (1994) 97 Gupta, S.K., see Nikam, P.J., 20 (1992) 313

Gurovich, L.A. and Ramos, R., Spatial variability of rainfall and yield of maize in a semi-arid region, 10 (1985) 13

Gustard, A., Regional variability of soil characteristics for flood and low flow estimation, 6 (1983) 255

Gutiérrez Boem, F.H., see Alconada, M., 23 (1993) 233

H

Hackwell, S.G., Prasher, S.O. and Barrington, S.F., Testing of a field scale drainage model on subsurface-drained farmlands, 20 (1991) 29

Hajrasuliha, S., see Dahiya, I.S., 3 (1980) 3

Hamdy, A., see Katerij, N., 21 (1992) 107 Hamdy, A., see Van Hoorn, J.W., 23 (1993) 247

Hamdy, A., Abdel-Dayem, S. and Abu-Zeid, M., Saline water management for optimum crop production, 24 (1993) 189

Hancock, N.H., see Smith, R.J., 11 (1986) 13

Hancock, N.H., see Smith, R.J., 18 (1990) 317 Hancock, N.H., see Smith, R.J., 20 (1991) 1

Hanson, B.R., Lancaster, D.L. and Goldhamer, D.A., Evaluating continuous-move sprinkler machines using time-series statistics, 12 (1986)

Hanson, B.R., A systems approach to drainage reduction in the San Joaquin Valley, 16 (1989)

Hanson, B.R., Prichard, T.L. and Schulbach, H., Estimating furrow infiltration, 24 (1993) 281 Hardjoamidjojo, S. and Skaggs, R.W., Predicting the effects of drainage systems on corn yields, 5 (1982) 127

Hares, M., see Clemente, R.S., 25 (1994) 135

Hari Krishna, J., Modelling the effects of tiedridging on water conservation and crop yields, 16 (1989) 87

Harlan, J.C., see Moore, D.G., 7 (1983) 363 Harp, S.L., see Elliott, R.L., 15 (1988) 155

Harris, G.L., see Goss, M.J., 6 (1983) 27

Harris, G.L., Effect of mole submergence on the life of mole channels, 8 (1984) 361

Harris, G.L., Howse, K.R. and Pepper, T.J., Effects of moling and cultivation on soil-water and runoff from a drained clay soil, 23 (1993) 161

Harun-Ur-Rashid, see Islam, T., 18 (1990) 173

Harun-Ur-Rashid, M., Estimation of Manning's roughness coefficient for basin and border irrigation, 18 (1990) 29

Hashim, O., see Reid, J.B., 9 (1984) 193

Hatfield, J.L., Perrier, A. and Jackson, R.D., Estimation of evapotranspiration at one timeof-day using remotely sensed surface temperatures, 7 (1983) 341

Hatfield, J.L., See Jackson, R.D., 7 (1983) 351 Hatfield, J.L., Vauclin, M., Vieira, S.R. and Bernard, R., Surface temperature variability

patterns within irrigated fields, 8 (1984) 429 Hayes, J.T., see Terjung, W.H., 6 (1983) 43

Hayes, J.T., see Terjung, W.H., 8 (1984) 411

Hayhoe, H.N., see De Jong, R., 9 (1984) 47 Hayhoe, H.N., see Clemente, R.S., 25 (1994) 135

Hedge, D.M. and Srinivas, K., Effect of soil matric potential and nitrogen on growth, yield, nutrient uptake and water use of banana, 16 (1989) 109

Heermann, D.F., see Ahmad, S., 18 (1990) 1

Heilman, J.L., see Moore, D.G., 7 (1983) 363 Heilman, J.L., see Newton, R.W., 7 (1983) 379

Helalia, A.M., El-Amir, S., Wahdan, A.A. and Shawky, M.E., Effect of low salinity water on salt displacement in two soils, 19 (1991) 43

Helalia, A.M., The relation between soil infiltration and effective porosity in different soils, 24 (1993) 39

Helweg, O.J., see Hussain, G., 25 (1994) 35

Hendrickx, J.M.H., see Wierenga, P.J., 9 (1985) 339

Hendrickx, J.M.H., Vink, N.H. and Fayinke, T., Water requirement for irrigated rice in a semiarid region in West Africa, 11 (1986) 75

Hendrickx, J.M.H., Dekker, L.W., Bannink, M.H. and Van Ommen, H.C., Significance of soil survey for agrohydrological studies, 14 (1988) 195

Hendrickx, J.M.H., Wierenga, P.J. and Nash, M.S., Variability of soil water tension and soil water content, 18 (1990) 135

Henschke, C.J., see Nulsen, R.A., 4 (1981) 173

Hess, T.M. and Morris, J., Estimating the value of flood alleviation on agricultural grassland, 15 (1988) 141

Heuperman, A.F., The Tongola groundwater pumping/re-use project: a pilot study for groundwater table control in the Shepparton region in northern Victoria, 14 (1988) 513

 Hignett, C.T., see Greacen, E.L., 8 (1984) 291
 Hilhorst, M.A. and De Jong, J.J., A dielectric tensiometer (Technical Note), 13 (1988) 411

Hill, R.W., see Battikhi, A.M., 15 (1988) 177

Hill, R.W., see Ghani, M.A., 20 (1991) 233

Hillman, R.M., Land and stream salinity in Western Australia, 4 (1981) 11

Hobbs, E.H., see Foroud, N., 21 (1992) 215Hodges, M.E., Stone, J.F., Garton, J.E. and Weeks, D.L., Variance of water advance in

wide-spaced furrow irrigation, 16 (1989) 5
Hodges, M.E., Stone, J.F. and Reeves, H.E., Yield variability and water use in wide-spaced furrow irrigation, 16 (1989) 15

Hodnett, M.G., see Batchelor, C.H., 17 (1990) 75 Hodnett, M.G., see Bell, J.P., 17 (1990) 171

Hodnett, M.G., Bell, J.P., Ah Koon, P.D., Soopramanien, G.C. and Batchelor, C.H., The control of drip irrigation of sugarcane using 'index' tensiometers: some comparisons with control by the water budget method, 17 (1990) 189

Hoffman, G.J., Dirksen, C., Ingvalson, R.D., Maas, E.V., Oster, J.D., Rawlins, S.L., Rhoades, J.D. and Van Schilfgaarde, J., Minimizing salt in drain water by irrigation management. Design and initial results of Arizona field studies, 1 (1978) 233

Hoffman, G.J., Rawlins, S.L., Oster, J.D., Jobes, J.A. and Merrill, S.D., Leaching requirement for salinity control, I. Wheat, sorghum, and lettuce, 2 (1979) 177

Hoffman, G.J., see Jobes, J.A., 4 (1981) 393

Hoffman, G.J. and Jobes, J.A., Leaching requirement for salinity control, III. Barley, cowpea, and celery, 6 (1983) 1

Hoffman, G.J., Jobes, J.A. and Alves, W.J., Response of tall fescue to irrigation water salinity, leaching fraction, and irrigation frequency, 7 (1983) 439

Hoffman, G.J., Oster, J.D., Maas, E.V., Rhoades, J.D. and Van Schilfgaarde, J., Minimizing salt in drain water by irrigation management — Arizona field studies with citrus, 9 (1984) 61

Hoffman, G.J., Oster, J.D., Maas, E.V., Rhoades, J.D. and Van Schilfgaarde, J., Minimizing salt in drain water by irrigation management — leaching studies with alfalfa, 9 (1984) 89

Hoffman, G.J., see El-Mowelhi, N., 15 (1988) 131 Hoffman, G.J., see Rhoades, J.D., 16 (1989) 25 Hoffman, G.J., see Nightingale, H.L., 19 (1991)

271

Hohman, J.P., see Pinter, P.J., 18 (1990) 35 Holmes, J.W. and Wronski, E.B., The influence of plant communities upon the hydrology of catchments, 4 (1981) 19

Holmes, J.W., Measuring evapotranspiration by hydrological methods, 8 (1984) 29

Holst, K.A., see Madsen, H.B., 17 (1990) 391

Holzapfel, E.A., Mariño, M.A. and Chavez-Morales, J., Comparison and selection of furrow irrigation models, 9 (1984) 105

Holzapfel, E.A., Mariño, M.A. and Chavez-Morales, J., Performance irrigation parameters and their relationship to surface-irrigation design variables and yield, 10 (1985) 159

Homma, F., An electrical analogue to design subirrigation systems, 6 (1983) 321

Hopmans, J.W. and Van Immerzeel, C.H., Variation in evapotranspiration and capillary rise with changing soil profile characteristics, 13 (1988) 297

Hopmans, J.W., Treatment of spatially variable groundwater levels in one-dimensional stochastic unsaturated water-flow modelling, 15 (1988) 19

Hore, F.R., see Phillips, P.A., 5 (1982) 29 Hornsby, A.C., see Rao, P.S.C., 6 (1983) 277

Hornsby, A.G., Davidson, J.M., Cassel, D.K. and Bruce, R.R., Regional field study of the spatial variability of selected soil physical properties, 6 (1983) 269

Hossain, M.M., see Fapohunda, H.O., 9 (1984)

Hossain, M.M., see Fapohunda, H.O., 18 (1990)

Howse, K.R., see Goss, M.J., 6 (1983) 27 Howse, K.R., see Harris, G.L., 23 (1993) 161 Hudson, J.A., see Roberts, G., 9 (1984) 177 Hudson, J.A., see Roberts, G., 11 (1986) 231

Hughes, S.W., see Grimes, D.W., 12 (1987) 293 Hulsman, R.B., Closed border irrigation evalua-

tions, 9 (1984) 139

Hume, I.H., Determination of infiltration characteristics by volume balance for border check irrigation, 23 (1993) 23 Hundal, S.S. and De Datta, S.K., In situ water transmission characteristics of a tropical soil under rice-based cropping systems, 8 (1984) 387

Hunsaker, D.J., Bucks, D.A. and Jaynes, D.B., Irrigation uniformity of level basins as influenced by variations in soil water content and surface elevation, 19 (1991) 325

Hunsaker, D.J. and Bucks, D.A., Statistical analyses of soil variability: effects of variability on level-basin irrigation of wheat, 21 (1992) 177

Husain, Ch.M., see Johnson III, S.H., 1 (1978)

Hussain, G., Sadiq, M., Nabulsi, Y.A. and Helweg, O.J., Effect of saline water on establishment of windbreak trees, 25 (1994) 35

Hussain, I.A., see Al-Khafaf, S., 15 (1989) 377 Hussain, S.M., see Eloubaidy, A.F., 24 (1993) 1

Hussain, Z., Problems of irrigated agriculture in Al-Hassa, Saudi Arabia, 5 (1982) 359

Hutmacher, R.B., Steiner, J.J., Vail, S.S. and Ayars, J.E., Crop water stress index for seed alfalfa: influences of within-season changes in plant morphology, 19 (1991) 135

Hutmacher, R.B., see Ayars, J.E., 19 (1991) 151

I

Idso, S.B., Jackson, R.D. and Reginato, R.J., Remote sensing for agricultural water management and crop yield prediction, 1 (1978) 299

Idso, S.B., see Kimball, B.A., 7 (1983) 55

Idso, S.B., see Jackson, R.D., 7 (1983) 351

Idso, S.B., see Pinter, P.J., 18 (1990) 35 Ike, I.F., see Nwadukwe, P.O., 16 (1989) 241

Imberger, J., The influence of stream salinity on reservoir water quality, 4 (1981) 255

Imtiyaz, M., see Singh, P.K., 20 (1991) 245

Ingvalson, R.D., see Hoffman, G.J., 1 (1978) 233

Islam, M.N., see Mondal, M.K., 23 (1993) 11

Islam, M.T., see Mondal, M.K., 23 (1993) 11
Islam, T., Sarker, H., Alam, J. and Harun-Ur-Rashid, Water use and yield relationships of irrigated potato, 18 (1990) 173

Islam, T., Water use of a winter wheat cultivar (Triticum aestivum), 19 (1991) 77

Issar, A., see Karnieli, A., 14 (1988) 243

Iyada, A.D., see Al-Khafaf, S., 16 (1989) 323

Izuno, F.T. and Podmore, T.H., Surge irrigation management, 11 (1986) 279

J

Jaber, A., see Regev, A., 18 (1990) 347

Jackson, R.D., see Idso, S.B., 1 (1978) 299

Jackson, R.D., see Wiegand, C.L., 7 (1983) 303 Jackson, R.D., see Hatfield, J.L., 7 (1983) 341

Jackson, R.D., Hatfield, J.L., Reginato, R.J., Idso, S.B. and Pinter, P.J., Jr., Estimation of daily evapotranspiration from one time-of-day measurements, 7 (1983) 351

Jackson, R.D., see Pinter, P.J., 18 (1990) 35

Jackson, S.H., Relationships between normalized leaf water potential and crop water stress index values for acala cotton, 20 (1991) 109

Jacovides, C., Papaioannou, G. and Kerkides, P., Micro and large-scale parameters evaluation of evaporation from a lake, 13 (1988) 263

Jacquemoud-Collet, J.P., see Combres, J.C., 17 (1990) 211

Jahirul Islam, M.D. and Mondal, M.K., Water management strategy for increasing monsoon rice production in Bangladesh, 22 (1992) 335

Jain, A.K. and Murty, V.V.N., Simulation of soil moisture profiles for scheduling of irrigations, 10 (1985) 175

Jalota, S.K., Prihar, S.S., Sandhu, B.S. and Khera, K.L., Yield, water use and root distribution of wheat as affected by pre-sowing and postsowing irrigation, 2 (1980) 289

James, L.G., see Stockle, C.O., 19 (1991) 167

Jannot, Ph. and Schnabele, D., The French Programme of Drainage Reference Areas. Methodology and first results, 14 (1988) 53

Jannot, Ph., Drainage and crop production system on intensive dairy farms in western France, 14 (1988) 61

Jansen, J.M.L., Hydrological research and the design of a water management system for a peatland area with agriculture and nature in the land consolidation project Echtener and Groote Veenpolder, 14 (1988) 389

Jansen, P.C., see Kemmers, R.H., 14 (1988) 399
Jarvis, P.G., see McNaughton, K.G., 8 (1984) 263
Jayawardane, N.S., see Maheshwari, B.L., 21 (1992) 265

 Jaynes, D.B., see Hunsaker, D.J., 19 (1991) 325
 Jenkin, J.J., Terrain, groundwater and secondary salinity in Victoria, Australia, 4 (1981) 143

Jenkins, A., see Smedema, L.K., 13 (1988) 1

Jensen, J.R., Mannan, S.M.A. and Uddin, S.M.N., Irrigation requirement of transplanted monsoon rice in Bangladesh, 23 (1993) 199 Jensen, S.D. and Cavalieri, A.J., Drought tolerance in US maize, 7 (1983) 223

Jessup, R.E., see Rao, P.S.C., 6 (1983) 277

Ji, H-Y., see Terjung, W.H., 6 (1983) 43 Ji, H-Y., see Terjung, W.H., 8 (1984) 411

Jingwen, L., see Deju, Z., 23 (1993) 67

Jobes, J.A., see Hoffman, G.J., 2 (1979) 177

Jobes, J.A., Hoffman, G.J. and Wood, J.D., Leaching requirement for salinity control, II. Oat, tomato, and cauliflower, 4 (1981) 393

Jobes, J.A., see Hoffman, G.J., 6 (1983) 1 Jobes, J.A., see Hoffman, G.J., 7 (1983) 439

Johnson III, S.H., Khan, Z.S. and Husain, Ch.M., The economics of precision land levelling: a case study from Pakistan, 1 (1978) 319

Johnson, M.S., see Woodhouse, J., 20 (1991) 63 Johnston, C.D., see Peck, A.J., 4 (1981) 83

Joosten, J.H.J, see Van Walsum, P.E.V., 25 (1994) 45

Jordan, W.R., Dugas, W.A., Jr. and Shouse, P.J., Strategies for crop improvement for droughtprone regions, 7 (1983) 281

Jorjani, H. and Visser, J., A statistical analysis of the effect of drainage conditions and nitrogen fertilizer on apple production, 16 (1989) 251

Jorjani, H. and Van Vuuren, W., Physical and economic benefits of subsurface drainage by soil type in eastern Ontario, 19 (1991) 235

Josan, A.S., see Bajwa, M.S., 16 (1989) 53

Josan, A.S., see Bajwa, M.S., 16 (1989) 217

Josan, A.S., see Bajwa, M.S., 22 (1992) 345 Joshi, B.P., see Singh, P.N., 12 (1987) 311

Joyce, K., Todd, R.L., Asmussen, L.E. and Leonard, R.A., Dissolved oxygen, total organic carbon and temperature relationships in southeastern U.S. coastal plain watersheds, 9 (1985) 313

Juana, L., see Losada, A., 18 (1990) 289 Jung, R., see Singh, G., 23 (1993) 343 Jutras, P.J., see Madramootoo, C.A., 9 (1984) 149

K

Kallsen, C.E., see Abdul-Jabbar, A.S., 6 (1983) 351

Kalra, V.D., see Dhruva Narayana, V.V., 3 (1980) 143

Kamra, S.K., Dhruva Narayana, V.V. and Rao, K.V.G.K., Water harvesting for reclaiming alkali soils, 11 (1986) 127 Kanemasu, E.T., Steiner, J.L., Biere, A.W., Worman, F.D. and Stone, J.F., Irrigation in the Great Plains, 7 (1983) 157

Kanemasu, E.T., see Rachidi, F., 24 (1993) 49

Kantz, D., see Seginer, I., 19 (1991) 341

Kar, S., see Singh, P.V., 15 (1988) 189

Kar, S., see Sarkar, S., 21 (1992) 137Karakos, A.S., see Tsakiris, G.P., 9 (1985) 325

Karamouzis, D., Zissis, T. and Terzidis, G., Non-dimensional diagrams for unsteady drainage problems with or without recharge, 13 (1988)
 145

Kargougou, I., see Crabtee, R.J., 10 (1985) 253Karnieli, A., Ben-Asher, J., Dodi, A., Issar, A.and Oron, G., An empirical approach for predicting runoff yield under desert conditions, 14 (1988) 243

Kashefipour, S.M., see Sepaskhah, A.R., 25 (1994) 13

Kastanek, F., Drainage problems in mountainous areas, 14 (1988) 169

Katerij, N., Van Hoorn, J.W., Hamdy, A., Bouzid, A., El-Sayed Mahrous, S. and Mastrorilli, M., Effect of salinity on water stress, growth and yield of broadbeans, 21 (1992) 107

Katerij, N., see Van Hoorn, J.W., 23 (1993) 247 Kaul, A.K., see Rahman, S.M., 3 (1981) 217

Kay, M., Recent developments for improving water management in surface and overhead irrigation, 17 (1990) 7

Keener, M.E., see Brown, K.W., 1 (1978) 277
Kemachandra, R.A.D. and Murty, V.V.N., Modelling irrigation deliveries for tertiary units in large irrigation systems, 21 (1992) 197

Kemmers, R.H. and Jansen, P.C., Hydrochemistry of rich fen and water management, 14 (1988) 399

Kerkides, P., see Jacovides, C., 13 (1988) 263

Kerkides, P., see Poulovassilis, A., 13 (1988) 317
Kerr, G., Pochop, L., Fornstrom, K.J., Krall, J.M.
and Brown, D., Soil water and ET estimates
for a wide range of rainfed and irrigated
conditions, 24 (1993) 147

Khan, B.R., Mainuddin, M. and Molla, M.N., Design, construction and testing of a lysimeter for a study of evapotranspiration of different crops, 23 (1993) 183

Khan, Z.S., see Johnson III, S.H., 1 (1978) 319

Khepar, S.D. and Chaturvedi, M.C., Optimum decisions for lining irrigation canal distribution networks, 2 (1979) 217

Khepar, S.D., see Kumar, R., 3 (1980) 65 Khera, K.L., see Jalota, S.K., 2 (1980) 289 Khera, K.L., see Sandhu, B.S., 3 (1980) 35 Khosla, B.K., Gupta, R.K. and Abrol, I.P., Salt leaching and the effect of gypsum application in a saline-sodic soil, 2 (1979) 193

Khosla, B.K., see Minhas, P.S., 12 (1986) 63

Kimball, B.A. and Idso, S.B., Increasing atmospheric CO₂: effects on crop yield, water use and climate, 7 (1983) 55

Kinarti, A., see Ben-Asher, J., 22 (1992) 379

Kindler, J., Modelling derived demand for irrigation water, 13 (1988) 403

King, B.A. and Busch, J.R., Computer model for on-farm irrigation system planning, 24 (1993) 239

Kiountouzis, E., see Tsakiris, G., 5 (1982) 241

Kirkham, M.B., Water potential and turgor pressure as a selection basis for wind-grown winter wheat, 1 (1978) 343

Kirkham, M.B., see Rachidi, F., 24 (1993) 49

Kisebe, A.W.J., The organisation of Malawi's small holder sugar production under irrigation, 17 (1990) 295

Kizer, M.A., see Elliott, R.L., 15 (1988) 155

Klaij, M.C. and Vachaud, G., Seasonal water balance of a sandy soil in Niger cropped with pearl millet, based on profile moisture measurements, 21 (1992) 313

Klepper, B., Rickman, R.W. and Taylor, H.M., Farm management and the function of field crop root systems, 7 (1983) 115

Klocke, N., see Cahoon, J., 23 (1993) 41

Klopper Oosthuizen, L., see Bosch, D.J., 12 (1987) 231

Knapp, K.C., see Dinar, A., 10 (1985) 221

Knapp, K.C., see Dinar, A., 16 (1989) 155

Knight, S.S., see Cooper, C.M., 18 (1990) 149

Kohl, R.A., see Rasiah, V., 15 (1989) 387

Konikow, L.F., Role of solute-transport models in the analysis of groundwater salinity problems in agricultural areas, 4 (1981) 187

Koo, J.W., Edling, R.J. and Taylor, V., A laboratory reclamation study for sodic soils used for rice production, 18 (1990) 243

Kos, Z., Conjunctive use of water for irrigation, municipal and industrial water supply in Istra, Yugoslavia, 13 (1988) 211

Kowalik, P., Loveday, J., McIntyre, D.S. and Watson, C.L., Deep percolation during prolonged ponding of a swelling soil, and the effect of gypsum treatment, 2 (1979) 131

Kowalik, P., see Mosz, J., 5 (1982) 171

Kowalik, P., see Busoni, E., 7 (1983) 425

Kowalik, P.J. and Obarska-Pempkowiak, H., Determination of the permissible amount of liquid animal waste applied to soil filters, 10 (1985) 313

Kowalik, P.J., Water management and drainage design of a selected polder, 14 (1988) 103

Kowalski, K., see Peralta, R.C., 15 (1988) 1

Krall, J.M., see Kerr, G., 24 (1993) 147

Kranz, W., see Cahoon, J., 23 (1993) 41

Kranz, W.L., Eisenhauer, D.E. and Retka, M.T., Water and energy conservation using irrigation scheduling with center-pivot irrigation systems, 22 (1992) 325

Kriedemann, P.E., see Leuning, R., 19 (1991) 205Krieg, D.R., Photosynthetic activity during stress,7 (1983) 249

Krishnamurthy, I., see Devender Reddy, M., 3 (1981) 227

Kruseman, G.P. see Boumans, J.H., 14 (1988) 53

Kruseman, G.P., see Boumans, J.H., 14 (1988) 537 Kumar, A., see Sharma, D.K., 18 (1990) 267

Kumar, R. and Khepar, S.D., Decision models for optimal cropping patterns in irrigations based on crop water production functions, 3 (1980) 65

Kumar, R., see Singh, P., 23 (1993) 91 Kumar, V., see Singh, K.P., 3 (1981) 305 Kumbhare, P.S., see Sharma, D.P., 19 (1991) 223 Kumbhare, P.S., see Agnihotri, A.K., 22 (1992) 249

 Kundu, S.S., Skogerboe, G.V. and Walker, W.R.,
 Using a crop growth simulation model for evaluating irrigation practices, 5 (1982) 253
 Kuntze, H., see Blankenburg, J., 14 (1988) 451
 Kushwaha, H.S., see Tripathi, R.P., 12 (1986) 127

L

Lacewell, R.D., see Robinson, J.R.C., 21 (1992)

Laitos, W.R., see Baxter, J.C., 15 (1988) 115
Lancaster, D.L., see Hanson, B.R., 12 (1986) 87
Landsberg, J.J. and McMurtrie, R., Water use by isolated trees, 8 (1984) 223

Langdale, G.W., see Mills, W.C., 15 (1988) 61 Lankford, B.A., see Ellis, R.D., 17 (1990) 117

Lankford, B.A., see Ellis, R.D., 17 (1990) 117
Larson, W.E., Swan, J.B. and Shaffer, M.J., Soil management for semi-arid regions, 7 (1983) 89

Laryea, K.B., see Pathak, P., 16 (1989) 187 Lavado, R.S., see Alconada, M., 23 (1993) 233

Ledieu, J., see Ben Harrath, A., 10 (1985) 1

Lee, E.S., Raju, K.S. and Biere, A.W., Dynamic irrigation scheduling with stochastic rainfall, 19 (1991) 253 Leeds-Harrison, P.B., see Rao, K.V.G.K., 19 (1991) 303

Leeds-Harrison, P.B., see Brandyk, T., 21 (1992) 67

Legard, W.W., see Bucks, D.A., 10 (1985) 61

Legard, W.W., see Bucks, D.A., 10 (1985) 95

Legg, B.J., see Raupach, M.R., 8 (1984) 119 Lembke, W.D., see Mostaghimi, S., 15 (1989) 211

Lennaerts, A.B.M., Attia, F.A.R. and De Jong, S.J., Forecasting the suitability of pumped groundwater for irrigation in the Nile Valley, 14 (1988) 525

Leonard, R.A., see Joyce, K., 9 (1985) 313

Letey, J., see Dinar, A., 10 (1985) 221

Letey, J., see Rhoades, J.D., 16 (1989) 25

Letey, J., see Dinar, A., 16 (1989) 155

Leuning, R., Kriedemann, P.E. and McMurtrie, R.E., Simulation of evapotranspiration by trees, 19 (1991) 205

Levi, S., see Pasternak, D., 12 (1986) 137

Levine, G., Chin, L.T. and Miranda, S.M., Requirements for the successful introduction and management of rotational irrigation, 1 (1976) 41

Lightfoot, C.J., see Booth, R.J., 17 (1990) 49

Loh, I.C. and Stokes, R.A., Predicting stream salinity changes in south-western Australia, 4 (1981) 227

Lomax, K.M., Wood, J.D. and Guacelli, F.S., Emission characteristics of porous tubing, 15 (1988) 197

Lomen, D.O., Tonellato, P.J. and Warrick, A.W., Salt and water transport in unsaturated soil for non-conservative systems, 8 (1984) 397

López, J.G., see Giráldez, J.V., 14 (1988) 253

Losada, A., Juana, L. and Roldán, J., Operation diagrams for irrigation management, 18 (1990) 289

Loveday, J., see Kowalik, P., 2 (1979) 131

Lovell, C.J. and Youngs, E.G., A comparison of steady-state land-drainage equations, 9 (1984)

Lugg, D.G., see Abdul-Jabbar, A.S., 6 (1983) 351 Lugg, D.G., see Tubaileh, A.S., 12 (1986) 75

Luxmoore, R.J. and Sharma, M.L., Evapotranspiration and soil heterogeneity, 8 (1984) 279

M

Maas, E.V., see Hoffman, G.J., 1 (1978) 233 Maas, E.V., see Hoffman, G.J., 9 (1984) 61 Maas, E.V., see Hoffman, G.J., 9 (1984) 89

MacGregor, A.N., Bowler, D.G., Tan, T.O. and Syers, J.K., Removal of nitrogen and phosphorus from untreated milking-shed wastes after application to permanent pasture, 5 (1981) 181

MacMahon, P.C., see Mostaghimi, S., 15 (1989)

Madankumar, N., Prediction of soil moisture characteristics from mechanical analysis and bulk density data, 10 (1985) 305

Madramootoo, C.A. and Jutras, P.J., Supplemental irrigation of bananas in St. Lucia, 9 (1984) 149

Madramootoo, C.A. and Rigby, M., Effects of trickle irrigation on the growth and sunscald of bell peppers (Capsicum annuum L.) in southern Quebec, 19 (1991) 181

Madrane, A., see Bazza, M., 17 (1990) 337

Madsen, H., Irrigation, groundwater abstraction and stream flow depletion, 14 (1988) 345

Madsen, H.B. and Holst, K.A., Mapping of irrigation need based on computerized soil and climatic data, 17 (1990) 391

Maesschalck, G., see Verplancke, H., 14 (1988) 277

Magette, W.L., Pacheco, P.A. and Wheaton, F.W., Ion exchange treatment of subsurface drainage water, 18 (1990) 121

Mahan, M.O., see Evans, R.G., 23 (1993) 109

Maheshwari, B.L. and Turner, A.K., Some low-cost methods for seepage control in storage tanks in alfisols and vertisols, 12 (1986) 53

Maheshwari, B.L., Turner, A.K., McMahon, T.A. and Campbell, B.J., An optimization technique for estimating infiltration characteristics in border irrigation, 13 (1988) 13

Maheshwari, B.L., McMahon, T.A. and Turner, A.K., Sensitivity analysis of parameters of border irrigation models, 18 (1990) 277

Maheshwari, B.L., Effects of recession criteria on prediction of recession times in border irrigation models, 21 (1992) 167

Maheshwari, B.L. and Jayawardane, N.S., Infiltration characteristics of some clayey soils measured during border irrigation, 21 (1992) 265

Maheshwari, B.L., Development of a regressionbased model of border irrigation on cracking soils, 25 (1994) 167

Maianu, A., Twenty years of research on reclamation of salt-affected soils in Romanian rice fields, 9 (1984) 245

Mainuddin, M., see Khan, B.R., 23 (1993) 183 Malik, R.S., see Dahiya, I.S., 5 (1982) 61 Manges, H.L., see Buller, O., 19 (1991) 117

Manky, F.S., see Al-Khafaf, S., 15 (1989) 377

Mann, M., Pissarra, A. and Van Hoorn, J.W., Drainage and desalinization of heavy clay soil in Portugal, 5 (1982) 227

Mannan, S.M.A., see Jensen, J.R., 23 (1993) 199 Marcotte, D., see Gallichand, J., 20 (1992) 299

Mariño, M.A., see Holzapfel, E.A., 9 (1984) 105

Mariño, M.A., see Holzapfel, E.A., 10 (1985) 159Mariño, M.A., Tracy, J.C. and Taghavi, S.A., Fore-casting of reference crop evapotranspiration, 24 (1993) 163

Marshall, D.C.W., Toward optimal land drainage pumping, 23 (1993) 51

Martínez Beltrán, J., Drainage criteria for heavy soils with a shallow impervious layer, 14 (1988) 91

Mashali, A.M., see Boumans, J.H., 7 (1983) 411 Mason, D.J., see Cuttle, S.P., 13 (1988) 93

Mastrorilli, M., see Katerij, N., 21 (1992) 107

Mateos, L., Berengena, J., Orgaz, F., Diz, J. and Fereres, E., A comparison between drip and furrow irrigation in cotton at two levels of water supply, 19 (1991) 313

Mathis, M.E., see Schuelein, J.W., 7 (1983) 37

Mathur, I.N., see Gupta, G.P., 24 (1993) 63

Matrorilli, M., see Van Hoorn, J.W., 23 (1993) 247
Matthias, A.D., Salehi, R. and Warrick, A.W.,
Bare soil evaporation near a surface point-source emitter, 11 (1986) 257

Mauney, J.R., see Pinter, P.J., Jr., 6 (1983) 385
Maxwell, E.L., Remote monitoring of rangeland production, 7 (1983) 323

McIlroy, I.C., Terminology and concepts in natural evaporation, 8 (1984) 77

McIntyre, D.S., see Kowalik, P., 2 (1979) 131

McMahon, T.A., see Maheshwari, B.L., 13 (1988)

McMahon, T.A., see Maheshwari, B.L., 18 (1990) 277

McMurtrie, R., see Landsberg, J.J., 8 (1984) 223 McMurtrie, R.E., see Leuning, R., 19 (1991) 205

McNaughton, K.G. and Jarvis, P.G., Using the Penman-Monteith equation predictively, 8 (1984) 263

McNew, R.W., see Crabtee, R.J., 10 (1985) 253

McTernan, W.F. and Mize, E.D., Simulated effects of irrigation management in groundwater contamination, 20 (1992) 281

McTernan, W.F., see Daniels, B.T., 25 (1994) 23 McTernan, W.F., see Arora, P.A., 25 (1994) 57

Mendlinger, S., see De Malach, Y., 16 (1989) 201 Merkley, G.P., Walker, W.R. and Gichuki, F.N.,

Transient hydraulic modelling for improved

canal system operation, 18 (1990) 181

Merrill, S.D., see Hoffman, G.J., 2 (1979) 177 Messaoudi, M., see Bazza, M., 17 (1990) 337

Messina, M.G. and Duncan, J.E., Irrigation effects on growth and water use of Quercus virginiana (Mill.) on a Texas lignite surfacemined site, 24 (1993) 265

Meyer, W.S., see Reicosky, D.C., 10 (1985) 127
Michalopoulou, H. and Papaioannou, G., Reference crop evapotranspiration over Greece, 20 (1991) 209

Michelakis, N., Vougioucalou, E. and Clapaki, G., Water use, wetted soil volume, root distribution and yield of avocado under drip irrigation, 24 (1993) 119

Miller, A., see Nesmith, D.S., 17 (1990) 409

Miller, E., A low head drip irrigation system for smallholdings, 17 (1990) 37

Miller, M.R., Brown, P.L., Donovan, J.J., Bergatino, R.N., Sonderegger, J.L. and Schmidt, F.A., Saline seep development and control in the North American Great Plains hydrogeological aspects, 4 (1981) 115

Miller, S., see Carter, D.C., 19 (1991) 191

Milligan, A., see Greenwood, E.A.N., 22 (1992) 307

Mills, W.C., Thomas, A.W. and Langdale, G.W., Rainfall retention probabilities computed for different cropping-tillage systems, 15 (1988) 61

Minderhoud, P., A model for the design of drainage in flat agricultural lands, 5 (1982) 95

Minhas, P.S. and Khosla, B.K., Solute displacement in a silt loam soil as affected by the method of water application under different evaporation rates, 12 (1986) 63

Minhas, P.S., see Chauhan, C.P.S., 20 (1991) 223

Minhas, P.S., see Singh, R.B., 21 (1992) 93

Minhas, P.S. and Gupta, R.K., Conjunctive use of saline and non-saline waters, I. Response of wheat to initial salinity profiles and salinisation patterns, 23 (1993) 125

Minhas, P.S., see Naresh, R.K., 23 (1993) 139

Minhas, P.S. and Gupta, R.K., Conjunctive use of saline and non-saline waters, III. Validation and applications of a transient model for wheat, 23 (1993) 149

Minhas, P.S., Naresh, R.K., Chauhan, C.P.S. and Gupta, R.K., Field determined hydraulic properties of a sandy loam soil irrigated with various salinity and SAR waters, 25 (1994) 97

Miranda, S.M., see Levine, G., 1 (1976) 41

Misari, S.M., see Abdulmumin, S., 18 (1990) 159 Mishra, A.K., see Singh, P.K., 20 (1991) 245 Mishra, H.S., Rathore, T.R. and Pant, R.C., Effect of intermittent irrigation on groundwater table contribution, irrigation requirement and yield of rice in Mollisols of the Tarai Region, 18 (1990) 231

Mishra, H.S., Rathore, T.R. and Pant, R.C., Effect of varying water regimes on soil physical properties and yield of rice in mollisols of Tarai

region, 20 (1991) 71

Mishra, R.K., see Tripathi, R.P., 12 (1986) 127 Mitchell, B.D., see Paterson, E., 1 (1978) 311 Mittal, S.P., see Grewal, S.S., 16 (1989) 309

Miyamoto, S. and Bucks, D.A., Water quantity and quality requirements of guayule: current assessment, 10 (1985) 205

Mize, E.D., see McTernan, W.F., 20 (1992) 281Mohamed Saleem, M.A., see Astatke, A., 20 (1991) 173

Mohammad, F.S. and Al-Amoud, A.I., Water conservation through irrigation scheduling under arid climatic conditions, 24 (1993) 251

Mohan Reddy, J., see Suryavanshi, A.R., 11 (1986) 23

Molla, M.N., see Khan, B.R., 23 (1993) 183 Mondal, M.K., see Jahirul Islam, M.D., 22 (1992)

Mondal, M.K., Islam, M.N., Mowla, G., Islam, M.T. and Ghani, M.A., Impact of on-farm water management research on the performance of a gravity irrigation system in Bangladesh, 23 (1993) 11

Moolman, J.H., Effect of spatial variability on the estimation of the soluble salt content in a drip-irrigated saline loam soil, 15 (1989) 361

Moolman, J.H., see Fuller, K.D., 20 (1992) 255 Moore, D.G., Harlan, J.C., Heilman, J.L., Ohlen,

D.O. and Rosenthal, W.D., Infrared remote sensing for monitoring rainfall, 7 (1983) 363 Moran, R.J. and O'Shaughnessy, P.J., Determina-

Moran, R.J. and O'Shaughnessy, P.J., Determination of the evapotranspiration of *E. Regnans* forested catchments using hydrological measurements, 8 (1984) 57

Moreno, F., see Andreu, L., 25 (1994) 71

Morris, J., see Hess, T.M., 15 (1988) 141
Mostaghimi, S., MacMahon, P.C. and Lembke,
W.D., Surface and subsurface drainage simulations for a claypan soil, 15 (1989) 211

Mosz, J. and Kowalik, P., Influence of irrigation on the development and yield of potatoes, 5 (1982) 171

Mowla, G., see Mondal, M.K., 23 (1993) 11 Mulder, S.J., see Smith, R.J., 12 (1986) 99 Murty, V.V.N., see Gulati, H.S., 2 (1979) 79 Murty, V.V.N., see Jain, A.K., 10 (1985) 175 Murty, V.V.N., Azar, A.H., Sarwar, A. and Sudsaisin, K., Simulation of tertiary unit efficiencies in large irrigation systems, 21 (1992) 13
 Murty, V.V.N., see Kemachandra, R.A.D., 21 (1992) 197

N

Nabulsi, Y.A., see Hussain, G., 25 (1994) 35 Nagarajarao, Y., see Sundara Sarma, K.S., 1 (1976) 79

(1976) 79
Nakayama, F.S., see Bucks, D.A., 2 (1979) 149
Nakayama, F.S., see Gilbert, R.G., 3 (1981) 159
Nakayama, F.S., see Bucks, D.A., 10 (1985) 61
Nakayama, F.S., see Bucks, A., 10 (1985) 81
Nakayama, F.S., see Bucks, D.A., 10 (1985) 95
Nanou-Giannarou, A.I., see Demetriou, J.D., 13 (1988) 273

Naresh, R.K., Minhas, P.S., Goyal, A.K., Chauhan, C.P.S. and Gupta, R.K., Conjunctive use of saline and non-saline waters, II. Field comparisons of cyclic uses and mixing for wheat, 23 (1993) 139

Naresh, R.K., see Minhas, P.S., 25 (1994) 97 Narvis, N.J., see Andreu, L., 25 (1994) 71 Nash, M.S., see Hendrickx, J.M.H., 18 (1990) 135 Nash, P., see Dinar, A., 19 (1991) 51

Nayamuth, R., see Batchelor, C.H., 17 (1990) 75 Nayamuth, R., see Soopramanien, G.C., 22 (1992)

Nayamuth, R.A., see Roberts, J., 17 (1990) 95 Nelson, D., see Wichelns, D., 16 (1989) 293

Nemec, J., Role of hydrological forecasts and river flow modelling in rational agricultural water management in the perspective of a climate change — a case study of the Rivers Upper Nile and Niger, 13 (1988) 383

Nerd, A., see Pasternak, D., 24 (1993) 321

Nesmith, D.S., Miller, A. and Ritchie, J.T., An irrigation system for plots under a rain shelter (Short Communication), 17 (1990) 409

Newton, R.W., Heilman, J.L. and Van Bavel, C.H.M., Integrating passive microwave measurements with a soil moisture/heat flow model, 7 (1983) 379

Nielsen, D.R., Tillotson, P.M. and Vieira, S.R., Analyzing field-measured soil-water properties, 6 (1983) 93

Nieuwenhuis, G.J.A. and Wesseling, J., Effect of perforation and filter material on entrance resistance and effective diameter of plastic drain pipes, 2 (1979) 1

Nieuwenhuis, G.J.A., see Thunnissen, H.A.M., 15 (1989) 315

Nightingale, H.I., Davis, K.R. and Phene, C.J., Trickle irrigation of cotton: effect on soil chemical properties, 11 (1986) 159

Nightingale, H.I., Hoffman, G.J., Rolston, D.E. and Biggar, J.W., Trickle irrigation rates and soil salinity distribution in an almond (*Prunus amygdalus*) orchard, 19 (1991) 271

Nikam, P.J., Chauhan, H.S., Gupta, S.K. and Ram, S., Watertable behaviour in drained lands: effect of evapotranspiration from the water table, 20 (1992) 313

Nikolov, I., see Shospky, N., 13 (1988) 307

Nikolski, Y.N., The dependence of irrigation requirements on watertable depth in drained lands, 1 (1977) 191

Nir. D., see Seginer, I., 19 (1991) 341

Nixon, D.J., see Dodsworth, G.H., 17 (1990) 325

Nixon, P.R., see Wiegand, C.L., 7 (1983) 303

Njihia, C.M., Prospects of soil moisture conservation by fallowing in areas of medium agricultural potential in smallholder farming, 14 (1988) 265

Njobvu, S.L., The problems of running an efficient irrigation system on a small holder project, 17 (1990) 319

Nofziger, D.L., see Stone, J.F., 24 (1993) 27

Noirfalise, A., see Ben Harrath, A., 10 (1985) 1

Nonhebel, S., see Dolman, A.J., 14 (1988) 413

Norman, J.M., see Barfield, B.J., 7 (1983) 73

Novák, V., Estimation of soil-water extraction patterns by roots, 12 (1987) 271

Nulsen, R.A. and Henschke, C.J., Groundwater systems associated with secondary salinity in Western Australia, 4 (1981) 173

Nulsen, R.A., Evapotranspiration of four major agricultural plant communities in the southwest of Western Australia measured with large ventilated chambers, 8 (1984) 191

NWA, E.U., Frequency and amount of irrigation for maize in western Nigeria, 2 (1979) 233

Nwabuzor, S.S., Field validation of an empirical soil water model, 14 (1988) 317

Nwadukwe, P.O., Abdulmumin, S., Arora, Y. and Ike, I.F., Effects on irrigation frequency and watertable depths on root growth and yield of tomato in a tropical soil, 16 (1989) 241

0

O'Rourke, P.A., see Terjung, W.H., 6 (1983) 43 O'Rourke, P.A., see Terjung, W.H., 8 (1984) 411 O'Shaughnessy, P.J., see Moran, R.J., 8 (1984) 57

O'Shaughnessy, P.J., see Moran, R.J., 8 (1984) 57 O'Toole, J.C., see Tomar, V.S., 3 (1980) 83

Oad, R., see Sharma, D.N., 17 (1990) 367Obarska-Pempkowiak, H., see Kowalik, P.J., 10 (1985) 313

Obi, M.E., Runoff and soil loss from an oxisol in southeastern Nigeria under various management practices, 5 (1982) 193

Ohlen, D.O., see Moore, D.G., 7 (1983) 363

Omer, M.A., Saxton, K.E. and Bassett, D.L.,
Optimum sorghum planting dates in western
Sudan by simulated water budgets, 13 (1988)
33

Oosterbaan, R.J., Agricultural criteria for subsurface drainage: a systems analysis, 14 (1988) 79

Orgaz, F., see Mateos, L., 19 (1991) 313

Orlob, G.T. and Ghorbanzadeh, A., Impact of water resource development on salinization of semi-arid lands, 4 (1981) 275

Oron, G., Simulation of water flow in the soil under sub-surface trickle irrigation with water uptake by roots, 3 (1981) 179

Oron, G., Technical and economic considerations in the design of closed conduit irrigation systems: a case study, 5 (1982) 15

Oron, G., Yield of single versus twin-row trickle irrigated cotton, 9 (1984) 237

Oron, G., see Karnieli, A., 14 (1988) 243

Oron, G., Microcomputer for on-line control and operation of closed-conduit irrigation systems: an economical assessment, 16 (1989) 137

Oster, J.D., see Hoffman, G.J., 1 (1978) 233

Oster, J.D., see Hoffman, G.J., 2 (1979) 177 Oster, J.D., see Dirksen, C., 2 (1979) 241

Oster, J.D., see Hoffman, G.J., 9 (1984) 61

Oster, J.D., see Hoffman, G.J., 9 (1984) 89

Oster, J.D., see Wichelns, D., 18 (1990) 253

Oster, J.D., Irrigation with poor quality water (Review), 25 (1994) 271

P

Pacheco, P.A., see Magette, W.L., 18 (1990) 121
Pagliai, M., Pezzarossa, B., Zerbi, G., Alvino, A,
Pini, R. and Vigna Guidi, G., Soil porosity in

a peach orchard as influenced by watertable depth, 16 (1989) 63

Painuli, D.K. and Abrol, I.P., Effect of exchangeable sodium percent on surface sealing, 11 (1986) 247

Pal, D., see Singh, P.V., 15 (1988) 189

Pal, R., see Singh, M., 11 (1986) 293

Palanisami, K. and Flinn, J.C., Impact of varying water supply on input use and yields of tankirrigated rice, 15 (1989) 347

Panda, R.K., Sarkar, T.K. and Bhattacharya, A.K., Chance-constrained optimal windmill irrigation system design, 12 (1987) 279

Pant, R.C., see Mishra, H.S., 18 (1990) 231

Pant, R.C., see Mishra, H.S., 20 (1991) 71

Papadopoulos, I. and Stylianou, Y., Trickle irrigation of sunflower with municipal wastewater, 19 (1991) 67

Papaioannou, G., see Jacovides, C., 13 (1988) 263 Papaioannou, G., see Michalopoulou, H., 20 (1991) 209

Papoutsi-Psychoudaki, S. and Sutton, P., Details of the flow and bottom pressure downstream of a thin-plate weir, 13 (1988) 369

Pareek, O.P., see Sharma, K.D., 5 (1982) 73

Parkh, M.M., see Shrivastava, P.K., 25 (1994) 179 Parkinson, R.J., see Clark, A.M., 14 (1988) 113

Parkinson, R.J., Twomlow, S.J. and Reid, I., The hydrological response of a silty clay loam following drainage treatment, 14 (1988) 125

Parlange, J.Y., see Steenhuis, T.S., 14 (1988) 137
Parlange, J.Y., see Steenhuis, T.S., 14 (1988) 153

Parlange, M.B., see Steenhuis, T.S., 14 (1988) 137

Parlange, M.B., see Steenhuis, T.S., 14 (1988) 153

Parsons, J.E., Skaggs, R.W. and Doty, C.W., Simulation of controlled drainage in openditch drainage systems, 18 (1990) 301

Passioura, J.B., Roots and drought resistance, 7 (1983) 265

Pasternak, D., De Malach, Y. and Borovic, I., Irrigation with brackish water under desert conditions, I. Problems and solutions in production of onions (Allium Cepa L.), 9 (1984) 225

Pasternak, D., De Malach, Y. and Borovic, I., Irrigation with brackish water under desert conditions, II. Physiological and yield response of maize (Zea Mays) to continuous irrigation with brackish water and to alternating brackish-fresh-brackish water irrigation, 10 (1985) 47

Pasternak, D., De Malach, Y., Borovic, I. and Twersky, M., Irrigation with brackish water under desert conditions, III. Methods for achieving good germination under sprinkler irrigation with brackish water, 10 (1985) 335

Pasternak, D., De Malach, Y., Borovic, I., Shram, M. and Aviram, C., Irrigation with brackish water under desert conditions, IV. Salt tolerance studies with lettuce (*Lactuca sativa L.*), 11 (1986) 303

Pasternak, D., Zohar, Y., De Malach, Y., Borovic, I. and Twersky, M., Irrigation with brakish water under desert conditions, V. Nitrogen requirement of tomatoes (*Lycopersicon esculentum* Mill.) during germination under drip irrigation, 11 (1986) 313

Pasternak, D., Azoulai, A., Danon, A., Levi, S., De Malach, Y. and Shalev, G., Irrigation with brackish water under desert conditions, VI. Automated systems to produce a range of salt concentrations in irrigation water for experimental plots, 12 (1986) 137

Pasternak, D., De Malach, Y. and Borovic, I., Irrigation with brackish water under desert conditions, VII. Effect of time of application of brackish water on production of processing tomatoes (*Lycopersicon esculentum Mill.*), 12 (1986) 149

Pasternak, D., see De Malach, Y., 16 (1989) 201
Pasternak, D., Nerd, A. and De Malach, Y.,
Irrigation with brackish water under desert conditions. IX. The salt tolerance of six forage crops, 24 (1993) 321

Paterson, E. and Mitchell, B.D., Erosion deposits in tile-drains, 1 (1978) 311

Pathak, P., Laryea, K.B. and Singh, S., A modified contour bunding system for alfisols of the semi-arid tropics, 16 (1989) 187

Pathak, P., Runoff sampler for small agricultural watersheds, 19 (1991) 105

Patni, N.K., see Phillips, P.A., 5 (1982) 29

Paudyal, G.N. and Das Gupta, A., A nonlinear chance constrained model for irrigation planning, 18 (1990) 87

Peck, A.J., Johnston, C.D. and Williamson, D.R., Analyses of solute distributions in deeply weathered soils, 4 (1981) 83

Peck, A.J., Spatial variation of hydraulic conductivity of deeply weathered soils in Western Australia, 6 (1983) 291

Pepper, R.G. and Burke, K.L., Clay lining of leaking earth dams, 17 (1990) 379

Pepper, T.J., see Harris, G.L., 23 (1993) 161

Peralta, R.C., see Datta, B., 11 (1986) 91

Peralta, R.C. and Kowalski, K., Optimal volumetric and economic groundwater mining for the Arkansas Grand Prairie, 15 (1988) 1

Perrier, A., see Hatfield, J.L., 7 (1983) 341

Pezzarossa, B., see Pagliai, M., 16 (1989) 63

Phene, C.J., see Nightingale, H.I., 11 (1986) 159

Phene, C.J., Allee, C.P. and Pierro, J.D., Soil matric potential sensor measurements in realtime irrigation scheduling, 16 (1989) 173

Phene, C.J., see Ben-Asher, J., 22 (1992) 379

Phillips, P.A., Culley, J.L.B., Hore, F.R. and Patni, N.K., Dissolved inorganic nitrogen and phosphate concentration in discharge from two agricultural catchments in eastern Ontario, 5 (1982) 29

Pierro, J.D., see Phene, C.J., 16 (1989) 173 Pillai, N.N., see Tyagi, N.K., 23 (1993) 285

Pini, R., see Pagliai, M., 16 (1989) 63 Pinter, P.J., see Rhoades, J.D., 16 (1989) 25

Pinter, P.J., Zipoli, G., Reginato, R.J., Jackson, R.D., Idso, S.B. and Hohman, J.P., Canopy temperature as an indicator of differential water use and yield performance among wheat cultivars, 18 (1990) 35

Pinter, P.J., Jr., Fry, K.E., Guinn, G. and Mauney, J.R., Infrared thermometry: a remote sensing technique for predicting yield in water-stressed cotton. 6 (1983) 385

Pinter, P.J., Jr., see Jackson, R.D., 7 (1983) 351

Piper, B.S., Sensitivity of Penman estimates of evaporation to errors in input data, 15 (1989) 279

Pissarra, A., see Mann, M., 5 (1982) 227

Plamenac, N., Effects of subsurface drainage on heavy hydromorphic soil in the Nelindvor area, Yugoslavia, 14 (1988) 19

Pleban, S. and Amir, I., Design procedure of sprinkling laterals: the mathematical background of a computerized aid, 3 (1981) 269

Pochop, L., see Kerr, G., 24 (1993) 147

Podmore, T., see Fonteh, M.F., 23 (1993) 271

Podmore, T.H., see Izuno, F.T., 11 (1986) 279 Podmore, T., see Fonteh, M.F., 25 (1994) 153

Poelman, A., see Smedema, L.K., 10 (1985) 283 Pollans, W.A., see Rao, P.S.C., 6 (1983) 277

Pollok, J.G., Experience with approximately 600 hectare of drip irrigation at Simunye Sugar Estate, Swaziland, 17 (1990) 151

Polychronides, M., see Poulovassilis, A., 13 (1988) 317

Pons, Y., Effect of watertable on yield and root depth of winter wheat in the French West Central Atlantic Marshlands, 14 (1988) 35

Poonia, S.R. and Raj Pal, The effect of organic manuring and water quality on water transmission parameters and sodication of a sandy loam soil, 2 (1979) 163

Poonia, S.R., see Siyag, R.S., 6 (1983) 15

Poonia, S.R., see Singh, M., 11 (1986) 293

Poulovassilis, A., Polychronides, M. and Kerkides, P., Evaluation of various computational schemes in calculating unsaturated hydraulic conductivity., 13 (1988) 317

Prak, H., The importance of hydrological research in designing rural water management systems as part of land development projects in the Netherlands, 14 (1988) 365

Prasad, S.N., see Ram, R.S., 11 (1986) 39

Prasher, S.O., see Hackwell, S.G., 20 (1991) 29

Prasher, S.O., see Gallichand, J., 20 (1992) 299

Prasher, S.O., see Gupta, G.P., 24 (1993) 63

Prato, T. and Dauten, K., Economic feasibility of agricultural management practices for reducing sedimentation in a water supply lake, 19 (1991) 361

Prichard, T.L., see Hanson, B.R., 24 (1993) 281
Priest, J.E., International competition for water
and motivations for dispute resolution, 21
(1992) 3

Prihar, S.S., see Jalota, S.K., 2 (1980) 289

Prihar, S.S., see Sandhu, B.S., 3 (1980) 35

Prihar, S.S., see Gajri, P.R., 6 (1983) 31

Q

Querner, E.P., Description of a regional groundwater flow model SIMGRO and some applications, 14 (1988) 209

Quisenberry, J.E., see Rosenow, D.T., 7 (1983)

R

Raats, P.A.C., Convective transport of solutes by steady flows, I. General theory, 1 (1978) 201

Raats, P.A.C., Convective transport of solutes by steady flows, II. Specific flow problems, 1 (1978) 219

Raats, P.A.C., see Dirksen, C., 2 (1979) 241

Raats, P.A.C., Residence times of water and solutes within and below the root zone, 4 (1981) 63

Raats, P.A.C., Implications of some analytical solutions for drainage of soil water, 6 (1983) 161 Rachidi, F., Kirkham, M.B., Stone, L.R. and Kanemasu, E.T., Soil water depletion by sunflower and sorghum under rainfed conditions, 24 (1993) 49

Radulovich, R.A., Optimization of rainfed tropical cropping in semi-dry areas: a case study, 16 (1989) 337

Raes, D., see Van Aelst, P., 13 (1988) 113

Ragab, R.A. and Amer, F., Estimating watertable contribution to the water supply of maize, 11 (1986) 221

Ragab, R.A., see Van Aelst, P., 13 (1988) 113

Raghava Reddy, C. and Sami Reddy, S., Scheduling irrigation for peanuts with variable amounts of available water, 23 (1993)

Rahman, S.M., Talukdar, S.U., Kaul, A.K. and Biswas, M.R., Yield response of a semi-dwarf wheat variety to irrigation on a calcareous brown flood plain soil of Bangladesh, 3 (1981) 217

Raj Pal, see Poonia, S.R., 2 (1979) 163

Rajput, G.S. and Singh, J., Water production functions for wheat under different environmental conditions, 11 (1986) 319

Raju, K.S., see Lee, E.S., 19 (1991) 253

Ram, R.S. and Singh, V.P., A design procedure for closed end irrigation borders, 5 (1982) 1

Ram, R.S., see Singh, V.P., 9 (1984) 127

Ram, R.S., Singh, V.P. and Prasad, S.N., A quasisteady state integral model for closed-end border irrigation, 11 (1986) 39

Ram, S., see Nikam, P.J., 20 (1992) 313

Ram, S., see Singh, K.M., 20 (1992) 329

Rama Mohan Rao, M.S., Ranga Rao, V., Ramachandram, M. and Agnihotri, R.C., Effect of vertical mulch on moisture conservation and yield of sorghum in vertisols, 1 (1978) 333

Ramachandram, M., see Rama Mohan Rao, M.S., 1 (1978) 333

Raman, S., see Shrivastava, P.K., 25 (1994) 179
Ramaseshaiah, K., see Govind Reddy, M., 6
(1983) 403

Rambal, S., see Garnier, E., 11 (1986) 145 Rami Reddy, S., see Bhaskara Reddy, G., 3 (1980) 45

Ramos, R., see Gurovich, L.A., 10 (1985) 13 Rands, J.G., see Armstrong, A.C., 14 (1988) 43 Ranga Rao, V., see Rama Mohan Rao, M.S., 1

(1978) 333

Rao, B.K., see Wagenet, R.J., 6 (1983) 227 Rao, K.V.G.K., see Kamra, S.K., 11 (1986) 127 Rao, K.V.G.K., see Sharma, D.P., 19 (1991) 223 Rao, K.V.G.K. and Leeds-Harrison, P.B., Desalinization with subsurface drainage, 19 (1991) 303

Rao, K.V.G.K., see Agnihotri, A.K., 22 (1992) 249Rao, N.H., Sarma, P.B.S. and Chander, S., A simple dated water-production function for use in irrigated agriculture, 13 (1988) 25

Rao, N.H., Sarma, P.B.S. and Chander, S., Irrigation scheduling under a limited water supply,

15 (1988) 165

Rao, N.H., Sarma, P.B.S. and Chander, S., Realtime adaptive irrigation scheduling under a limited water supply, 20 (1992) 267

Rao, P.S.C., Jessup, R.E., Hornsby, A.C., Cassel, D.K. and Pollans, W.A., Scaling soil microhydrologic properties of Lakeland and Konawa soils using similar media concepts, 6 (1983) 277

Rao, U.M.B., see Vijayalakshmi, K., 16 (1989) 279

Rasiah, V. and Kohl, R.A., Soybean root water uptake in two soils, 15 (1989) 387

Rasmussen, W.W. and Berg, R.D., Within-row irrigation saves water on croplands, 11 (1986)

Rasnick, B.A., see Bucks, A., 10 (1985) 81

Rathore, T.R., see Mishra, H.S., 18 (1990) 231

Rathore, T.R., see Mishra, H.S., 20 (1991) 71

Raupach, M.R. and Legg, B.J., The uses and limitations of flux-gradient relationships in micrometeorology, 8 (1984) 119

Rawlins, S.L., Uniform irrigation with a low-head bubbler system, 1 (1977) 167

Rawlins, S.L., see Hoffman, G.J., 1 (1978) 233 Rawlins, S.L., see Hoffman, G.J., 2 (1979) 177

Reddy, J.M. and Clyma, W., Analysis of basin irrigation performance with variable inflow rate, 5 (1982) 295

Reddy, J.M. and Clyma, W., Choosing optimal design depth for surface irrigation systems, 6 (1983) 335

Reeves, H.E., see Stone, J.F., 5 (1982) 309 Reeves, H.E., see Hodges, M.E., 16 (1989) 15

Regev, A., Jaber, A., Spector, R. and Yaron, D., Economic evaluation of the transition from a traditional to a modernized irrigation project, 18 (1990) 347

Reginato, R.J., see Idso, S.B., 1 (1978) 299 Reginato, R.J., see Jackson, R.D., 7 (1983) 351 Reginato, R.J., see Pinter, P.J., 18 (1990) 35

Reicosky, D.C., Meyer, W.S., Schaefer, N.L. and Sides, R.D., Cotton response to short-term waterlogging imposed with a watertable gradient facility, 10 (1985) 127 Reid, I., see Clark, A.M., 14 (1988) 113

Reid, I., see Parkinson, R.J., 14 (1988) 125

Reid, J.B., Hashim, O. and Gallagher, J.N., Relations between available and extractable soil water and evapotranspiration from a bean crop, 9 (1984) 193

Rengasamy, P., Importance of calcium in irrigation with saline-sodic water — a viewpoint, 12 (1987) 207

Renger, M., see Adiku, S.G.K., 21 (1992) 235 Replogle, J.A., see Rhoades, J.D., 16 (1989) 25

Retka, M.T., see Kranz, W.L., 22 (1992) 325

Reynolds, W.D., see Clemente, R.S., 25 (1994) 135

Rhoades, J.D. and Suarez, D.L., Reducing water quality degradation through minimized leaching management, 1 (1977) 127

Rhoades, J.D., see Hoffman, G.J., 1 (1978) 233
Rhoades, J.D., Determining leaching fraction

from field measurements of soil electrical conductivity, 3 (1981) 205

Rhoades, J.D., see Hoffman, G.J., 9 (1984) 61 Rhoades, J.D., see Hoffman, G.J., 9 (1984) 89

Rhoades, J.D., Bingham, F.T., Letey, J., Hoffman, G.J., Dedrick, A.R., Pinter, P.J. and Replogle, J.A., Use of saline drainage water for irrigation: Imperial Valley study, 16 (1989) 25

Rhoades, J.D., Intercepting, isolating and reusing drainage waters for irrigation to conserve water and protect water quality, 16 (1989) 37

Rhoades, J.D., see Dinar, A., 19 (1991) 51 Richard, T.L., see Steenhuis, T.S., 14 (1988) 137 Rickman, R.W., see Klepper, B., 7 (1983) 115

Riewe, R., see Foroud, N., 21 (1992) 215

9 (1984) 177

Rigby, M., see Madramootoo, C.A., 19 (1991) 181 Ritchie, J.T., see Nesmith, D.S., 17 (1990) 409

Ritzema, H.P., see El-Atfy, H.E., 19 (1991) 289 Roberts, A.M., see Roberts, G., 21 (1992) 155

Roberts, G., Hudson, J.A. and Blackie, J.R., Nutrient inputs and outputs in a forested and grassland catchment at Plynlimon, mid Wales,

Roberts, G., Hudson, J.A. and Blackie, J.R., Effect of upland pasture improvement on nutrient release in flows from a 'natural' lysimeter and a field drain, 11 (1986) 231

Roberts, G., France, M. and Robinson, M., Computing the water balance of a small agricultural catchment in southern England by consideration of different land-use types, I. Land classification using remotely-sensed imagery, 21 (1992) 145

Roberts, G. and Roberts, A.M., Computing the water balance of a small agricultural catch-

ment in southern England by consideration of different land-use types, II. Evaporative losses from different vegetation types, 21 (1992) 155

Roberts, J., Nayamuth, R.A., Batchelor, C.H. and Soopramanien, G.C., Plant-water relations of sugar cane (Saccharum officinarum L.) under a range of irrigated treatments, 17 (1990) 95

Roberts, J. and Rosier, P.T.W., Physiological studies in young *Eucalyptus* stands in southern India and derived estimates of forest transpiration, 24 (1993) 103

Robertson, C.A., see Berthelot, P.B., 17 (1990)

Robinson, J.R.C., Lacewell, R.D., Stoll, J.R. and Freeman, R., Estimating agricultural benefits from drainage over a relatively level terrain, 21 (1992) 79

Robinson, M., Ryder, E.L. and Ward, R.C., Influence on streamflow of field drainage in a small agricultural catchment, 10 (1985) 145

Robinson, M., see Roberts, G., 21 (1992) 145 Rogers, A.L., see Greenwood, E.A.N., 22 (1992)

Rogers, A.L., see Greenwood, E.A.N., 25 (1994)

Rogowski, A.S., Estimation of the groundwater pollution potential on an agricultural watershed, 18 (1990) 209

Roldán, J., see Giráldez, J.V., 14 (1988) 253

Roldán, J., see Losada, A., 18 (1990) 289

Rolston, D.E., see Nightingale, H.I., 19 (1991) 271

Romanowicz, R., see Brandyk, T., 16 (1989) 75

Rose, C.W., Modelling evapotranspiration: an approach to heterogeneous communities, 8 (1984) 203

Rose, C.W., see Eastham, J., 15 (1988) 87

Rose, R.W. and Sharma, M.L., Summary and recommendations of the Workshop on 'Evapotranspiration from Plant Communities', 8 (1984) 325

Rosenow, D.T., Quisenberry, J.E., Wendt, C.W. and Clarck, L.E., Drought tolerant sorghum and cotton germplasm, 7 (1983) 207

Rosenthal, W.D., see Moore, D.G., 7 (1983) 363

Rosier, P.T.W., see Roberts, J., 24 (1993) 103

Rossi Pisa, P., see Cavazza, L., 14 (1988) 29 Roth, C., see Adiku, S.G.K., 21 (1992) 235

Rubio, G., see Alconada, M., 23 (1993) 233

Ruffini, J.L., see Smith, R.J., 18 (1990) 317 Ruffini, J.L., see Smith, R.J., 20 (1991) 1

Rushton, K.R., see Walker, S.H., 11 (1986) 59

Ryder, E.L., see Robinson, M., 10 (1985) 145

Rydzewski, J.R., Irrigation project appraisal: outline of principles, 13 (1988) 359

S

Sabti, N.A., Linear and nonlinear solution of the Boussinesq equation for the bi-level drainage problem. 16 (1989) 269

Sachan, R.C., see Sivakumar, M.V.K., 3 (1981) 279

Sadiq, M., see Hussain, G., 25 (1994) 35

Sadler, B.S. and Williams, P.J., The evolution of a regional approach to salinity management in Western Australia, 4 (1981) 353

Sagi, G., The effect of filter feeding fish on water quality in irrigation reservoirs, 22 (1992) 369

Saini, B.C. and Ghildyal, B.P., Seasonal water use by winter wheat grown under shallow watertable conditions, 1 (1978) 263

Salama, R.B., see Farrington, P., 22 (1992) 357 Salehi, R., see Matthias, A.D., 11 (1986) 257 Saliem, L.H., see Al-Khafaf, S., 15 (1989) 377

Sami Reddy, S., see Raghava Reddy, C., 23 (1993)

Sammis, T. and Wu, I.P., Deficit irrigation effects on head cabbage production, 16 (1989) 229 Sammis, T.W., see Abdul-Jabbar, A.S., 6 (1983)

Sammis, T.W., see Tubaileh, A.S., 12 (1986) 75Sammis, T.W. and Wu, I.P., Fresh market tomato yields as affected by deficit irrigation using a micro-irrigation system, 12 (1986) 117

Sammis, T.W., see Asare, D.K., 22 (1992) 391 Samuel, K., see De Jong, R., 20 (1991) 87

Sandhu, B.S., see Jalota, S.K., 2 (1980) 289 Sandhu, B.S., Prihar, S.S. and Khera, K.L., Sugarcane response to irrigation and straw mulch in

a subtropical region, 3 (1980) 35 Sanesi, G., see Busoni, E., 7 (1983) 425

Sangakkara, U.R., Response of selected legume companion crops to irrigation frequencies, 17 (1990) 257

Sankara Reddi, G.H., see Bhaskara Reddy, G., 3 (1980) 45

Sarkar, S. and Kar, S., Estimation of water uptake pattern of groundnut (Arachis hypogaea L.), 21 (1992) 137

Sarkar, T.K., see Panda, R.K., 12 (1987) 279 Sarker, H., see Islam, T., 18 (1990) 173 Sarma, P.B.S., see Rao, N.H., 13 (1988) 25 Sarma, P.B.S., see Rao, N.H., 15 (1988) 165 Sarma, P.B.S., see Verma, H.N., 18 (1990) 195 Sarma, P.B.S., see Rao, N.H., 20 (1992) 267

Sarma, P.S. and Sivakumar, M.V.K., Response of groundnut to drought stress in different growth phases, 15 (1989) 301

Sarwar, A., see Murty, V.V.N., 21 (1992) 13 Sauer, T.J., see Scotter, D.R., 15 (1988) 73

Sawani, N.G., see Shrivastava, P.K., 25 (1994) 179 Saxton, K.E., see Omer, M.A., 13 (1988) 33

Saxton, K.E., see Stockle, C.O., 19 (1991) 167

Schaefer, N.L., see Reicosky, D.C., 10 (1985) 127 Schleiff, U., Osmotoc potentials of roots of onions and their rhizospheric soil solutions when irrigated with saline drainage waters (Short Communications), 3 (1981) 317

Schmidt, F.A., see Miller, M.R., 4 (1981) 115

Schmidt, J.W., Drought resistance and wheat breeding, 7 (1983) 181

Schmittner, K.-E. and Giresse, P., Mathematicstatistical simulation of topsoil particle losses during heavy rainfall, 25 (1994) 121

Schnabele, D., see Jannot, Ph., 14 (1988) 53 Schoneman, R.A., see Ayars, J.E., 19 (1991) 151

Schot, P.P., Barendregt, A. and Wassen, M.J., Hydrology of the wetland Naarderemeer: influence of the surrounding area and impact on vegetation, 14 (1988) 459

Schouten, P.H., Verstraelen, P.J.T. and Buntsma, J.J., Restoration of the Vecht lakes ecosystems surrounding the Horstermeer Polder: a feasibility study, 14 (1988) 471

Schouwenaars, J.M., Rainfall irregularity and sowing strategies in Southern Mozambique, 13 (1988) 49

Schouwenaars, J.M., The impact of water management upon groundwater fluctuations in a disturbed bog relict, 14 (1988) 439

Schuelein, J.W., Springer, H.L., Mathis, M.E., Zipser, R.A. and Booker, D.R., Considerations in the development of a state operational weather modification plan, 7 (1983) 37

Schulbach, H., see Hanson, B.R., 24 (1993) 281
Scotter, D.R., Clothier, B.E. and Sauer, T.J., A critical assessment of the role of measured hydraulic properties in the simulation of absorption, infiltration and redistribution of soil water, 15 (1988) 73

Scotter, D.R., see Tillman, R.W., 20 (1991) 119
Sedgley, R.H., Smith, R.E. and Tennant, D., Management of soil water budgets of recharge areas for control of salinity in south-western Australia, 4 (1981) 313

Sedgley, R.H., see Yunusa, I.A.M., 22 (1992) 291 Sedgley, R.H., see Yunusa, I.A.M., 24 (1993) 205 Sedgley, R.H., see Yunusa, I.A.M., 24 (1993) 225 Seetharama, N., see Sivakumar, M.V.K., 3 (1981) 279

Seginer, I., Kantz, D. and Nir, D., The distortion by wind of the distribution patterns of single sprinklers, 19 (1991) 341

Sekendar, M.A., Entrance resistance of enveloped drainage pipes, 8 (1984) 351

Sekhon, B.S. and Bajwa, M.S., Effect of organic matter and gypsum in controlling soil sodicity in rice-wheat-maize system irrigated with sodic waters, 24 (1993) 15

Sepaskhah, A.R. and Kashefipour, S.M., Relationships between leaf water potential, CWSI, yield and fruit quality of sweet lime under drip irrigation, 25 (1994) 13

Shaffer, M.J., see Larson, W.E., 7 (1983) 89

Shah, M. and Sinai, G., Salinity control in multiquality irrigation networks — Kibbutz Hamadia feasibility study, 10 (1985) 235

Shalev, G., see Pasternak, D., 12 (1986) 137

Shalhevet, J., Using water of marginal quality for crop production: major issues, 25 (1994) 233

Shanan, L., Special Issue: "Planning and Management of Irrigation Systems in Developing Countries", 22 (1992) 1

Sharhan, F.A., see Al-Khafaf, S., 16 (1989) 323

Sharma, B.R. and Chaudhary, T.N., Wheat root growth, grain yield and water uptake as influenced by soil water regime and depth of nitrogen placement in a loamy sand soil, 6 (1983) 365

Sharma, D.K., Kumar, A. and Singh, K.N., Effect of irrigation scheduling on growth, yield and evapotranspiration of wheat in sodic soils, 18 (1990) 267

Sharma, D.K. and Singh, K.N., Effect of irrigation on growth, yield and evapotranspiration of mustard (*Brassica juncea*) in partially reclaimed sodic soils, 23 (1993) 225

Sharma, D.N. and Oad, R., Variable-time model for equitable irrigation water distribution, 17 (1990) 367

Sharma, D.P., Singh, K.N., Rao, K.V.G.K. and Kumbhare, P.S., Irrigation of wheat with saline drainage water on a sandy loam soil, 19 (1991) 223

Sharma, D.P., see Agnihotri, A.K., 22 (1992) 249Sharma, K.D., Pareek, O.P. and Singh, H.P., Effect of runoff concentration on growth and yield of jujube, 5 (1982) 73

Sharma, K.D., Runoff behaviour of water harvesting micro-catchments, 11 (1986) 137 Sharma, M.L., Evapotranspiration from a eucalyptus community, 8 (1984) 41

Sharma, M.L., see Luxmoore, R.J., 8 (1984) 279

Sharma, M.L., see Rose, R.W., 8 (1984) 325 Sharma, P.N. and Alonso Neto, F.B., Water pro-

Sharma, P.N. and Alonso Neto, F.B., Water production function of sorghum for northeast Brazil, 11 (1986) 169

Sharpley, A.N., Smith, S.J. and Ahuja, L.R., Soluble potassium transport in agricultural runoff water, 15 (1988) 37

Sharratt, B.S., Observations and modeling of interactions between barley yield and evapotranspiration in the subarctic, 25 (1994) 109

Shawky, M.E., see Helalia, A.M., 19 (1991) 43

Shepherd, K.J., South Australia's approach to salinity management in the River Murray, 4 (1981) 335

Shiati, K., A regional approach to salinity management in river basins. A case study in southern Iran, 19 (1991) 27

Shirk, K.S., see Gilmour, J.T., 1 (1978) 253

Shkinkis, C., Investigations about the optimum depth of drains in loamy soils in Latvia, 24 (1993) 83

Shkinkis, C.N., Subsurface drainage results for over-wetted soils of the Latvian S.S.R., 2 (1979) 55

Shospky, N., Doneva, E. and Nikolov, I., Characteristics of mole drainage as a major ameliorative technique for surface-waterlogged soils, 13 (1988) 307

Shouse, P.J., see Jordan, W.R., 7 (1983) 281 Shram, M., see Pasternak, D., 11 (1986) 303

Shrivastava, P.K., Parikh, M.M., Sawani, N.G. and Raman, S., Effect of drip irrigation and mulching on tomato yield, 25 (1994) 179

Siddoway, F.H., see Black, A.L., 4 (1981) 295 Sides, R.D., see Reicosky, D.C., 10 (1985) 127

Silberbush, M., Adar, E. and De Malach, Y., Use of an hydrophilic polymer to improve water storage and availability to crops grown in sand dunes, I. Corn irrigated by trickling, 23 (1993)

Silberbush, M., Adar, E. and De Malach, Y., Use of an hydrophilic polymer to improve water storage and availability to crops grown in sand dunes, II. Cabbage irrigated by sprinkling with different water salinities, 23 (1993) 315

Silburn, D.M., see Freebairn, D.M., 12 (1986) 1 Simpson, G.M., see Clarke, J.M., 1 (1978) 351

Sinai, G., see Shah, M., 10 (1985) 235 Sinai, G.S., see Fry, R.K., 9 (1984) 23

Singh, G. and Bhushan, L.S., Water use, wateruse efficiency and yield of dryland chickpea as influenced by P fertilization, stored soil water and crop season rainfall, 2 (1980) 299

Singh, G., Singh, P.N. and Bhushan, L.S., Water use and wheat yields in northern India under different irrigation regimes, 3 (1980) 107

Singh, G., see Singh, P.N., 12 (1987) 311

Singh, G., Brown, D.M. and Barr, A.G., Modelling soil water status for irrigation scheduling in potatoes, I. Description and sensitivity analysis, 23 (1993) 329

Singh, G., Brown, D.M., Barr, A.G. and Jung, R., Modelling soil water status for irrigation scheduling in potatoes, II. Validation, 23 (1993) 343

Singh, H. and Bajwa, M.S., Effect of sodic irrigation and gypsum on the reclamation of sodic soil and growth of rice and wheat plants, 20 (1991) 163

Singh, H.P., see Sharma, K.D., 5 (1982) 73

Singh, J., see Rajput, G.S., 11 (1986) 319

Singh, K.M., Singh, O.P., Ram, S. and Chauhan, H.S., Modified steady state drainage equations for transient conditions in subsurface drainage, 20 (1992) 329

Singh, K.N., see Sharma, D.K., 18 (1990) 267 Singh, K.N., see Sharma, D.P., 19 (1991) 223

Singh, K.N., see Sharma, D.K., 23 (1993) 225

Singh, K.P. and Kumar, V., Water use and wateruse efficiency of wheat and barley in relation to seeding dates, levels of irrigation and nitrogen fertilization, 3 (1981) 305

Singh, M., see Dahiya, I.S., 5 (1982) 61

Singh, M., Poonia, S.R. and Pal, R., Improvement of irrigation water by gypsum beds, 11 (1986) 293

Singh, O.P., see Tyagi, N.K., 2 (1979) 67

Singh, O.P., see Dhruva Narayana, V.V., 3 (1980) 143

Singh, O.P., see Singh, K.M., 20 (1992) 329

Singh, P. and Wolkewitz, H., Evapotranspiration, pan evaporation and soil water relationships for wheat (*Triticum aestivum*), 13 (1988) 65

Singh, P. and Kumar, R., Evapotranspiration from wheat under a semi-arid climate and a shallow watertable, 23 (1993) 91

Singh, P.K., Mishra, A.K. and Imtiyaz, M., Moisture stress and the water use efficiency of mustard, 20 (1991) 245

Singh, P.N., see Singh, G., 3 (1980) 107

Singh, P.N., Joshi, B.P. and Singh, G., Water use and yield response of wheat to irrigation and nitrogen on an alluvial soil in North India, 12 (1987) 311 Singh, P.V., Pal, D., Varade, S.B. and Kar, S., Determining percolation losses of packed clay soil from tensiometer data, 15 (1988) 189

Singh, R., see Bhardwaj, A., 22 (1992) 235

Singh, R.B., see Chauhan, C.P.S., 20 (1991) 223

Singh, R.B., Minhas, P.S., Chauhan, C.P.S. and Gupta, R.K., Effect of high salinity and SAR waters on salinization, sodication and yields of pearl-millet and wheat, 21 (1992) 93

Singh, S., see Pathak, P., 16 (1989) 187

Singh, V.P., Derivation of shape factors for border irrigation advance, 2 (1980) 271

Singh, V.P., see Ram, R.S., 5 (1982) 1

Singh, V.P. and Ram, R.S., Solution of the kinematic-wave equations for border irrigation, 9 (1984) 127

Singh, V.P., see Ram, R.S., 11 (1986) 39

Singh, V.P. and Yu, F.X., An analytical closed border irrigation model, I. Theory, 15 (1989) 223

Singh, V.P. and Yu, F.X., An analytical closed border irrigation model, II. Experimental verification, 15 (1989) 243

Sivakumar, M.V.K., Seetharama, N., Gill, K.S. and Sachan, R.C., Response of sorghum to moisture stress using line source sprinkler irrigation, 3 (1981) 279

Sivakumar, M.V.K., see Sarma, P.S., 15 (1989) 301Siyag, R.S., Poonia, S.R. and Baruah, T.C., Effect of mixed cation solutions on hydraulic soil properties, 6 (1983) 15

Skaggs, R.W., see Hardjoamidjojo, S., 5 (1982) 127

Skaggs, R.W., see Parsons, J.E., 18 (1990) 301 Skapski, K., see Brandyk, T., 21 (1992) 67

Skogerboe, G.V., see Barrett, J.W.H., 3 (1980) 53

Skogerboe, G.V., see Kundu, S.S., 5 (1982) 253Slabbers, P.J., Sorbello Herrendorf, V. and Stapper, M., Evaluation of simplified water-crop

yield models, 2 (1979) 95 Slabbers, P.J. and Dunin, F.X., Wheat yield estimation in northwest Iran, 3 (1981) 291

Smeal, D., see Abdul-Jabbar, A.S., 6 (1983) 351

Smedema, L.K. and Van der Meer, K., The role of adapted farming in the solution of drainage problems on basin clay soils, 2 (1980) 257

Smedema, L.K., Furrow irrigation design for vertisols, 9 (1984) 211

Smedema, L.K., Poelman, A. and De Haan, W., Use of the Hooghoudt formula for drain spacing calculations in homogeneous-anisotropic soils, 10 (1985) 283

Smedema, L.K., see Boumans, J.H., 12 (1986) 41

Smedema, L.K. and Jenkins, A., Desalinisation of recently accreted coastal land in the eastern part of the Bay of Bengal, Bangladesh, 13 (1988) 1

Smedema, L.K., Watertable control indices for drainage of agricultural land in humid climates, 14 (1988) 69

Smedema, L.K., Cost effectiveness of soil investigations for pipe drainage projects, 18 (1990) 333

Smith, R.E., see Sedgley, R.H., 4 (1981) 313

Smith, R.J. and Hancock, N.H., Leaching requirement of irrigated soils, 11 (1986) 13

Smith, R.J., Watts, P.J. and Mulder, S.J., Analysis and design of gated irrigation pipelines, 12 (1986) 99

Smith, R.J., Hancock, N.H. and Ruffini, J.L., Flood flow through tall vegetation, 18 (1990) 317

Smith, R.J., Hancock, N.H. and Ruffini, J.L., Strip cropping — development of guidelines for the selection of strip spacing, 20 (1991) 1

Smith, S.J., see Sharpley, A.N., 15 (1988) 37

Sonderegger, J.L., see Miller, M.R., 4 (1981) 115

Soopramanien, G.C., see Batchelor, C.H., 17 (1990) 75

Soopramanien, G.C., see Roberts, J., 17 (1990) 95
 Soopramanien, G.C., Berthelot, B. and Batchelor,
 C.H., Irrigation research, development and
 practice in Mauritius, 17 (1990) 129

Soopramanien, G.C., see Hodnett, M.G., 17 (1990) 189

Soopramanien, G.C., see Wallace, J.S., 17 (1990) 235

Soopramanien, G.C., Nayamuth, R. and Batchelor, C.H., Effect of water regime on yield of drip irrigated first ratoon cane intercropped with maize and groundnut, 22 (1992) 281

Sorbello Herrendorf, V., see Slabbers, P.J., 2 (1979) 95

Spayd, S.E., see Evans, R.G., 23 (1993) 109

Spector, R., see Regev, A., 18 (1990) 347

Spoor, G., see Fry, R.K., 9 (1984) 23 Springer, H.L., see Schuelein, J.W., 7 (1983) 37

Srinivas, K., see Hedge, D.M., 16 (1989) 109

Stagnitti, F., see Steenhuis, T.S., 14 (1988) 153

Stanger, G., Coastal salinization: a case history from Oman, 9 (1985) 269

Stapper, M., see Slabbers, P.J., 2 (1979) 95

Steenhuis, T.S., Richard, T.L., Parlange, M.B., Aburime, S.O., Geohring, L.D. and Parlange, J.Y., Preferential flow influences on drainage of shallow sloping soils, 14 (1988) 137

Steenhuis, T.S., Parlange, J.Y., Parlange, M.B. and Stagnitti, F., A simple model for flow on hillslopes, 14 (1988) 153

Stein, A., see Wopereis, M.C.S., 21 (1992) 281

Steiner, J.J., see Hutmacher, R.B., 19 (1991) 135

Steiner, J.L., see Kanemasu, E.T., 7 (1983) 157

Steiner, R.A. and Walter, M.F., The effect of allocation and scheduling rules on equity and productivity in irrigation systems, 21 (1992) 297

Steiner, R.A. and Walter, M.F., The effect of allocation schedules on the performance of irrigation systems with different levels of spatial diversity and temporal variability, 23 (1993) 213

Stewart, J.B., Measurement and prediction of evaporation from forested and agricultural catchments, 8 (1984) 1

Stillwater, R. and Awad, M., Discharge and mechanical efficiency of Egyptian water wheels, 20 (1991) 135

Stockle, C.O., James, L.G., Bassett, D.L. and Saxton, K.E., Effect of evapotranspiration underprediction on irrigation scheduling and yield of corn: a simulation study, 19 (1991) 167

Stokes, R.A., see Loh, I.C., 4 (1981) 227

Stoll, J.R., see Robinson, J.R.C., 21 (1992) 79Stone, J.F., Reeves, H.E. and Garton, J.E., Irrigation water conservation by using wide-spaced

furrows, 5 (1982) 309 Stone, J.F., see Kanemasu, E.T., 7 (1983) 157

Stone, J.F., see Hodges, M.E., 16 (1989) 5 Stone, J.F., see Hodges, M.E., 16 (1989) 15

Stone, J.F. and Nofziger, D.L., Water use and yields of cotton grown under wide-spaced furrow irrigation, 24 (1993) 27

Stone, L.R., see Buller, O., 19 (1991) 117 Stone, L.R., see Rachidi, F., 24 (1993) 49

Strebbel, O. and Böttcher, J., Solute input into groundwater from sandy soils under arable land and coniferous forest: determination of area-representative mean values of concentration, 15 (1989) 265

Stroosnijder, L., see Ten Berge, H.F.M., 6 (1983) 213

Stuyt, L.C.P.M., see Zissis, T., 20 (1991) 47

Stylianou, Y., see Papadopoulos, I., 19 (1991) 67 Suarez, D.L., see Rhoades, J.D., 1 (1977) 127

Subba Rao, K., see Govind Reddy, M., 6 (1983) 403

Sudsaisin, K., see Murty, V.V.N., 21 (1992) 13

Sundara Sarma, K.S. and Nagarajarao, Y., Field infiltration indices in the evaluation of tillage practices, 1 (1976) 79 Sung, F.J.M., The effect of leaf water status on stomatal activity, transpiration and nitrate reductase of sweet potato, 4 (1981) 465

Suryavanshi, A.R. and Mohan Reddy, J., Optimal operation schedule of irrigation distribution systems, 11 (1986) 23

Sutton, P., see Papoutsi-Psychoudaki, S., 13 (1988)

Svehlik, Z.J., see Ghali, G.S., 13 (1988) 127 Svehlik, Z.J., see Ghali, G.A., 14 (1988) 307 Swan, J.B., see Larson, W.E., 7 (1983) 89

Sweet, C.P.M., see Dodsworth, G.H., 17 (1990) 325

Syers, J.K., see MacGregor, A.N., 5 (1981) 181

T

Taghavi, S.A., see Mariño, M.A., 24 (1993) 163
 Talsma, T. and Van der Lelij, A., Water balance estimates of evaporation from ponded rice fields in a semi-arid region, 1 (1976) 89

Talsma, T., Transport of salts in catchments and soils, 4 (1981) 103

Talukdar, S.U., see Rahman, S.M., 3 (1981) 217 Tan, T.O., see MacGregor, A.N., 5 (1981) 181 Tanji, K.K., River basin hydrosalinity modelling, 4

(1981) 207 Tanwar, B.S., see Boumans, J.H., 14 (1988) 537 Taylor, H.M., see Klepper, B., 7 (1983) 115

Taylor, V., see Koo, J.W., 18 (1990) 243
 Ten Berge, H.F.M., Stroosnijder, L., Burrough, P.A., Bregt, A.K. and De Heus, M.J., Spatial variability of physical soil properties influencing the temperature of the soil surface, 6 (1983) 213

Tennant, D., see Sedgley, R.H., 4 (1981) 313 Tennant, D., see Yunusa, I.A.M., 22 (1992) 291 Tennant, D., see Yunusa, I.A.M., 24 (1993) 205

Tennant, D., see Yunusa, I.A.M., 24 (1993) 225 Terjung, W.H., Ji, H-Y., Hayes, J.T., O'Rourke,

P.A. and Todhunter, P.E., Crop water requirements for rainfed and irrigated grain corn in China, 6 (1983) 43

Terjung, W.H., Ji, H-Y., Hayes, J.T., O'Rourke, P.A. and Todhunter, P.E., Crop water requirements for rainfed and irrigated wheat in China and Korea, 8 (1984) 411

Terzidis, G., see Karamouzis, D., 13 (1988) 145 Terzidis, G., see Anastasiadou-Partheniou, L., 13 (1988) 157

Terzis, G.C., see Tsakiris, G.P., 9 (1985) 325

Tewari, S.K., An analysis of the appropriateness of wind and other energy systems for irrigation water pumping in India, 4 (1981) 445

Thomas, A., Agricultural water balance of Yunnan Province, PR China: agroclimatic zoning with a Geographical Information System, 21 (1992) 249

Thomas, A.W., see Mills, W.C., 15 (1988) 61 Thomas, J.C., see Brown, K.W., 1 (1978) 277

Thunnissen, H.A.M. and Nieuwenhuis, G.J.A., An application of remote sensing and soil water balance simulation models to determine the effect of groundwater extraction on crop evapotranspiration, 15 (1989) 315

Tiligadas, E., Effect of different parameters on entrance resistance of corrugated plastic drains, 13 (1988) 225

Tillman, R.W., Scotter, D.R., Clothier, B.E. and White, R.E., Solute movement during intermittent water flow in a field soil and some implications for irrigation and fertilizer application, 20 (1991) 119

Tillotson, P.M., see Nielsen, D.R., 6 (1983) 93 Todd, R.L., see Joyce, K., 9 (1985) 313

Todhunter, P.E., see Terjung, W.H., 6 (1983) 43

Todhunter, P.E., see Terjung, W.H., 8 (1984) 411
Tomar, V.S. and O'Toole, J.C., Water use in lowland rice cultivation in Asia: a review of evapotranspiration, 3 (1980) 83

Tonellato, P.J., see Lomen, D.O., 8 (1984) 397 Tóth, L.M., see Bognár, N., 14 (1988) 97

Towner, G.D., A method for improving cheaply the time response of pressure-transducer tensiometer systems, 5 (1982) 285

Tracy, J.C., see Mariño, M.A., 24 (1993) 163

Tripathi, R.P., Kushwaha, H.S. and Mishra, R.K., Irrigation requirements of rice under shallow watertable conditions, 12 (1986) 127

Tsakiris, G. and Kiountouzis, E., A model for the optimal operation of an irrigation system, 5 (1982) 241

Tsakiris, G., Daily potential evapotranspiration modelling, 13 (1988) 393

Tsakiris, G.P., A method for applying crop sensitivity factors in irrigation scheduling, 5 (1982) 335

Tsakiris, G.P., Terzis, G.C. and Karakos, A.S., A Pearson distribution model describing sprinkler irrigation efficiency, 9 (1985) 325

Tubaileh, A.S., Sammis, T.W. and Lugg, D.G., Utilization of thermal infrared thermometry for detection of water stress in spring barley, 12 (1986) 75 Tuley, P. and Batchelor, C.H., A review of the highlights and seminal issues of the symposium on the irrigation of sugarcane and associated crops — Mauritius, 17 (1990) 1

Turner, A.K. and Chanmeesri, N., Shallow flow of water through non-submerged vegetation, 8

(1984) 375

Turner, A.K., see Maheshwari, B.L., 12 (1986) 53
Turner, A.K., see Maheshwari, B.L., 13 (1988) 13
Turner, A.K., see Maheshwari, B.L., 18 (1990) 277

Turner, F.T., see Brown, K.W., 1 (1978) 277

Turner, N.C., Plant water relations and irrigation management, 17 (1990) 59

Twersky, M., see Pasternak, D., 10 (1985) 335 Twersky, M., see Pasternak, D., 11 (1986) 313

Twomlow, S.J., see Parkinson, R.J., 14 (1988) 125

Tyagi, K.C., see Tyagi, N.K., 23 (1993) 285Tyagi, N.K., Singh, O.P. and Dhruva Narayana,V.V., Evaluation of water management systems

in a tubewell irrigated farm, 2 (1979) 67

Tyagi, N.K. and Dhruva Narayana, V.V., Groundwater recharge under alkali soils during reclamation, 5 (1982) 51

Tyagi, N.K., Tyagi, K.C., Pillai, N.N. and Willardson, L.S., Decision support for irrigation system improvement in saline environment, 23 (1993) 285

Tyem, M.N. and Chieng, S.T., Irrigation scheduling effects on yield and phosphorus uptake of cowpea, 10 (1985) 343

I

Uddin, S.M.N., see Jensen, J.R., 23 (1993) 199

V

Vachaud, G., Vauclin, M. and Balabanis, P., Stochastic approach of soil water flow through the use of scaling factors: measurement and simulation, 13 (1988) 249

Vachaud, G., see Klaij, M.C., 21 (1992) 313 Vachaud, G., see Andreu, L., 25 (1994) 71 Vail, S.S., see Hutmacher, R.B., 19 (1991) 135 Vail, S.S., see Ayars, J.E., 19 (1991) 151

Vaksman, M., A computer model to simulate the water balance of an 'andic' soil, 17 (1990) 265

Van Aelst, P., Ragab, R.A., Feyen, J. and Raes, D., Improving irrigation management by modelling the irrigation schedule, 13 (1988) 113

Van Bakel, P.J.T., Operational aspects of surface water management in relation to the hydrology of agricultural areas and nature reserves, 14 (1988) 377

Van Bavel, C.H.M., see Newton, R.W., 7 (1983) 379

Van de Graaff, R.H.M., see Brouwer, J., 14 (1988) 287

Van den Broek, B.J., see Wesseling, J.G., 14 (1988) 299

Van der Hoek, D. and Van der Schaaf, S., The influence of water level management and groundwater quality on vegetation development in a small nature reserve in the southern Gelderse Vallei (the Netherlands), 14 (1988) 423

Van der Lelij, A., see Talsma, T., 1 (1976) 89 Van der Meer, K., see Smedema, L.K., 2 (1980) 257

Van der Molen, W.H., see Dierickx, W., 4 (1981) 429

Van der Molen, W.H., Hydrology of natural wetlands and wet nature reserves, 14 (1988) 357

Van der Molen, W.H. and Wesseling, J., A solution in closed form and a series solution to replace the tables for the thickness of the equivalent layer in Hooghoudt's drain spacing formula, 19 (1991) 1

Van der Schaaf, S., see Van der Hoek, D., 14 (1988) 423

Van der Sluijs, P. and De Gruijter, J.J., Watertable classes: a method to describe seasonal fluctuation and duration of watertables on Dutch soil maps, 10 (1985) 109

Van Hoorn, J.W., Salt movement, leaching efficiency, and leaching requirement, 4 (1981) 409

Van Hoorn, J.W., see Mann, M., 5 (1982) 227 Van Hoorn, J.W., see Boumans, J.H., 14 (1988)

Van Hoorn, J.W., Development of soil salinity during germination and early seedling growth and its effect on several crops, 20 (1991) 17

Van Hoorn, J.W., see Katerij, N., 21 (1992) 107

Van Hoorn, J.W., Katerij, N., Hamdy, A. and Matrorilli, M., Effect of saline water on soil salinity and on water stress, growth, and yield of wheat and potatoes, 23 (1993) 247

Van Immerzeel, C.H., see Hopmans, J.W., 13 (1988) 297 Van Ommen, H.C., Systems approach to an unsaturated-saturated groundwater quality model, including adsorption, decomposition and bypass, 10 (1985) 193

Van Ommen, H.C., Calculating the quality of drainage water from non-homogeneous soil profiles with an extension to an unsaturatedsaturated groundwater quality model including bypass flow, 10 (1985) 293

Van Ommen, H.C., see Hendrickx, J.M.H., 14 (1988) 195

Van Schilfgaarde, J., see Hoffman, G.J., 1 (1978) 233

Van Schilfgaarde, J., Dryland management for salinity control, 4 (1981) 383

Van Schilfgaarde, J., see Hoffman, G.J., 9 (1984) 61

Van Schilfgaarde, J., see Hoffman, G.J., 9 (1984) 89

Van Schilfgaarde, J., Irrigation — a blessing or a curse, 25 (1994) 203

Van Vilsteren, A.E.M., see Brzesowsky, W.J., 13 (1988) 83

Van Vuuren, W., see Jorjani, H., 19 (1991) 235 Van Vuuren, W.E., see Arnold, G.E., 14 (1988) 219

Van Walsum, P.E.V. and Joosten, J.H.J, Quantification of local ecological effect in regional hydrologic modelling of bog reserves and surrounding agricultural lands, 25 (1994) 45

Van Wijk, A.L.M., see Feddes, R.A., 1 (1976) 3 Varade, S.B., see Singh, P.V., 15 (1988) 189

Varley, I., Optimizing the uniformity of irrigation and fertilization, 13 (1988) 285

Vauclin, M., see Hatfield, J.L., 8 (1984) 429 Vauclin, M., see Vachaud, G., 13 (1988) 249 Veen, A.W.L., see Wierda, A., 21 (1992) 119 Venkatachari, A., see Devender Reddy, M., 3

(1981) 227

Verlinden, H.L., see Bouma, J., 1 (1976) 67
Verma, H.N. and Sarma, P.B.S., Design of storage tanks for water harvesting in rainfed areas, 18 (1990) 195

Verplancke, H., Maesschalck, G. and De Boodt, M., Effect of water conservation on the yield of upland crops in the humid tropics, 14 (1988) 277

Verstraelen, P.J.T., see Schouten, P.H., 14 (1988) 471

Vieira, S.R., see Nielsen, D.R., 6 (1983) 93 Vieira, S.R., see Hatfield, J.L., 8 (1984) 429

Vigna Guidi, G., see Pagliai, M., 16 (1989) 63 Vijayalakshmi, K., Vittal, K.P.R. and Rao, U.M.B., Minimal irrigation on small agricultural watersheds with red soils in the semi-arid tropics of Andhra Pradesh, India, 16 (1989) 279

Vink, N.H., see Hendrickx, J.M.H., 11 (1986) 75 Visser, J., see Jorjani, H., 16 (1989) 251

Vittal, K.P.R., see Vijayalakshmi, K., 16 (1989) 279

Voet, M. and Dierickx, W., Roughness coefficients of watercourses revetted with half-circular concrete pipes. Results of field measurements in watercourse S 333 at Maarkedal, 19 (1991) 17

Vougioucalou, E., see Michelakis, N., 24 (1993)



Wagenet, R.J. and Rao, B.K., Description of nitrogen movement in the presence of spatially variable soil hydraulic properties, 6 (1983) 227 Waggoner, B.L., see Dinar, A., 19 (1991) 51 Wahdan, A.A., see Helalia, A.M., 19 (1991) 43 Walker, S.H. and Rushton, K.R., Water losses

Walker, S.H. and Rushton, K.R., Water losses through the bunds of irrigated rice fields interpreted through an analogue model, 11 (1986) 59

Walker, W.R., see Kundu, S.S., 5 (1982) 253
Walker, W.R., see Merkley, G.P., 18 (1990) 181
Wallace, J.S., Batchelor, C.H., Dabesing, D.N. and Soopramanien, G.C., The partitioning of

and Soopramanien, G.C., The partitioning of light and water in drip irrigated plant cane with a maize intercrop, 17 (1990) 235
Walter, M.F., see Steiner, R.A., 21 (1992) 297
Walter, M.F., see Steiner, R.A., 23 (1993) 213

Wample, R.L. and Farrar, S.L., Yield and quality of furrow and trickle irrigated hop (*Humulus Lupulus L.*) in Washington State, 7 (1983) 457

Wample, R.L., see Evans, R.G., 23 (1993) 109 Ward, R.C., see Robinson, M., 10 (1985) 145 Warrick, A.W., see Lomen, D.O., 8 (1984) 397 Warrick, A.W., see Matthias, A.D., 11 (1986) 257 Warrick, A.W., see Ben-Asher, J., 12 (1987) 177 Wassen, M.J., see Schot, P.P., 14 (1988) 459

Watson, C.L., see Kowalik, P., 2 (1979) 131 Watson, G.D., see Farrington, P., 22 (1992) 357 Watson, G.D., see Greenwood, E.A.N., 25 (1994)

Watson, P.G., see Guerra, L.C., 17 (1990) 351 Watts, P.J., see Angus, D.E., 8 (1984) 133 Watts, P.J., see Smith, R.J., 12 (1986) 99 Webb, E.K., Evaluation of evapotranspiration and canopy resistance: an alternative combination approach, 8 (1984) 151

Webster, R. and Burgess, T.M., Spatial variation in soil and the role of kriging, 6 (1983) 111 Weeks, D.L., see Hodges, M.E., 16 (1989) 5

Wellings, S.R. and Cooper, J.D., The variability of recharge of the English Chalk aquifer, 6 (1983) 243

Wellings, S.R., see White, R.E., 7 (1983) 391 Wellings, S.R., see Bell, J.P., 17 (1990) 171

Wendt, C.W., see Rosenow, D.T., 7 (1983) 207

Wesseling, J., see Nieuwenhuis, G.J.A., 2 (1979)

Wesseling, J., see Van der Molen, W.H., 19 (1991)1

Wesseling, J.G. and Van den Broek, B.J., Prediction of irrigation scheduling with the numerical model SWATRE, 14 (1988) 299

Westcot, D.W., Reuse and disposal of higher salinity subsurface drainage water - a review. 14 (1988) 483

Wheaton, F.W., see Magette, W.L., 18 (1990) 121 White, R.E., Wellings, S.R. and Bell, J.P., Seasonal variations in nitrate leaching in structured clay soils under mixed land use, 7 (1983)

White, R.E., see Tillman, R.W., 20 (1991) 119

Wichelns, D. and Nelson, D., An empirical model of the relationship between irrigation and the volume of water collected in subsurface drains, 16 (1989) 293

Wichelns, D. and Oster, J.D., Potential economic returns to improved irrigation infiltration uniformity, 18 (1990) 253

Wiegand, C.L., Nixon, P.R. and Jackson, R.D., Drought detection and quantification by reflectance and thermal responses, 7 (1983) 303

Wierda, A. and Veen, A.W.L., A rainfall simulator study of infiltration into arable soils, 21 (1992) 119

Wierenga, P.J. and Hendrickx, J.M.H., Yield and quality of trickle-irrigated chile peppers, 9 (1985) 339

Wierenga, P.J., see Al-Khafaf, S., 16 (1989) 323 Wierenga, P.J., see Hendrickx, J.M.H., 18 (1990) 135

Wilken, G.C., Manual irrigation in Middle America, 1 (1977) 155

Willardson, L.S., see Tyagi, N.K., 23 (1993) 285

Willey, R.W., Resource use in intercropping systems, 17 (1990) 215

Williams, J.R., see Buller, O., 19 (1991) 117 Williams, P.J., see Sadler, B.S., 4 (1981) 353 Williamson, D.R., see Peck, A.J., 4 (1981) 83 Wilson, P.N., see Coupal, R.H., 18 (1990) 15 Wockner, G.H., see Freebairn, D.M., 12 (1986) 1 Wolkewitz, H., see Singh, P., 13 (1988) 65

Wood, J.D., see Jobes, J.A., 4 (1981) 393 Wood, J.D., see Lomax, K.M., 15 (1988) 197

Woodhead, T., see Wopereis, M.C.S., 21 (1992)

Woodhouse, J. and Johnson, M.S., Effect of superabsorbent polymers on survival and growth of crop seedlings, 20 (1991) 63

Wopereis, M.C.S., Stein, A., Bouma, J. and Woodhead, T., Sampling number and design for measurements of infiltration rates into puddled rice fields, 21 (1992) 281

Worman, F.D., see Kanemasu, E.T., 7 (1983) 157 Wronski, E., A model of canopy drying, 8 (1984) 243

Wronski, E.B., see Holmes, J.W., 4 (1981) 19 Wu, I.-P., Optimal drip irrigation scheduling based on design uniformity, deficit application and crop response, 17 (1990) 323

Wu, I.P., see Sammis, T.W., 12 (1986) 117 Wu, I.P., see Sammis, T., 16 (1989) 229

Wyseure, G., Feyen, J. and Berlamont, J., A design-discharge calculation method based on the parallel use of reservoir models, 5 (1982) 205

Yamada, H., see Grimes, D.W., 12 (1987) 293

Yaron, D., Economics of irrigation and the institutional and pricing systems of water in Israel, 2 (1979) 203

Yaron, D., see Regev, A., 18 (1990) 347

Yassin, A.A., see Crabtee, R.J., 10 (1985) 253

Yazar, A., Evaporation and drift losses from sprinkler irrigation systems under various operating conditions, 8 (1984) 439

Yitayew, M., Interrelationships of performance parameters for irrigation borders, 12 (1987)

Yogeswara Rao, Y., see Govind Reddy, M., 6 (1983) 403

Yoo, K.H., Planning of irrigation distribution and application systems by mixed-integer linear programming, 10 (1985) 265

Yoo, K.H., Effects of crop and surface irrigation method on water intake rate of soil, 12 (1987) Young, L., see Cahoon, J., 23 (1993) 41

Youngs, E.G., Determination of the variation of hydraulic conductivity with depth in drained lands and the design of drainage installations, 1 (1976) 57

Youngs, E.G., The hydraulic effect of filter materials around gappy non-ideal field drains, 3 (1980) 17

Youngs, E.G., Soil physical theory and heterogeneity, 6 (1983) 145

Youngs, E.G., see Lovell, C.J., 9 (1984) 1

Youngs, E.G., An analysis of the effect of the vertical fissuring in mole-drained soils on drain performances, 9 (1985) 301

Youngs, E.G., Watertable heights in drained anisotropic homogeneous soils, 11 (1986) 1

Youngs, E.G., see Armstrong, A.C., 20 (1991) 101

Yu, F.X., see Singh, V.P., 15 (1989) 223

Yu, F.X., see Singh, V.P., 15 (1989) 243

Yüncüoğlu, H., see Dierickx, W., 5 (1982) 215

Yunusa, I.A.M., Sedgley, R.H. and Tennant, D., Dynamics of water use under annual legume pastures in a semi-arid mediterranean environment, 22 (1992) 291

Yunusa, I.A.M., Sedgley, R.H., Belford, R.K. and Tennant, D., Dynamics of water use in a dry mediterranean environment, I. Soil Evaporation little affected by presence of plant canopy, 24 (1993) 205 Yunusa, I.A.M., Sedgley, R.H., Tennant, D. and Belford, R.K., Dynamics of water use in a dry mediterranean environment, II. A test of four evaporation models using microlysimetry under spring wheat, 24 (1993) 225

Z

Zadrazil, H., Drag line irrigation, practical experiences with sugar cane, 17 (1990) 25

 Zaradny, H. and Feddes, R.A., Calculation of non-steady flow towards a drain in saturatedunsaturated soil by finite elements, 2 (1979) 37
 Zentner, R.P., see De Jong, R., 10 (1985) 31

Zerbi, G., see Pagliai, M., 16 (1989) 63

Zingk, M., Groundwater recharge in Schleswig-Holstein (West-Germany), 14 (1988) 339

Zipoli, G., see Pinter, P.J., 18 (1990) 35 Zipser, R.A., see Schuelein, J.W., 7 (1983) 37 Zissis, T., see Karamouzis, D., 13 (1988) 145

Zissis, T. and Stuyt, L.C.P.M., Effect of radial soil heterogeneity around a subsurface drain on the watertable height computed using a finite element model, 20 (1991) 47

Zohar, Y., see Pasternak, D., 11 (1986) 313 Zondervan, K., see Boers, Th.M., 12 (1986) 21